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CHRISTINE OSVALD-MRUZ
ADWOA AYO SANDERSON

May 28, 1996

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Paul L. Kahn
On-Scene Coordinator
Response and Prevention Branch
United States Environmental Protection Agency
2890 Woodbridge Avenue
Building 209, MS-211
Edison, NJ 08837-3679

Re: Request for Information Pursuant to §104 of the Comprehensive Environmental Response, Compensation and Liability Act 42 U.S.C. §9604

Dear Mr. Kahn:

On behalf of Congoleum Corporation (the "Company"), enclosed are responses to the United States Environmental Protection Agency, Region II's April 25, 1996 request for information which was received by the Company on April 30. On May 14, 1996, John Higgins, Section Chief, granted a 10-day extension to the Company for the submittal of this response. Please note that the certification of Michele B. Burroughs inadvertently identifies the date of the Agency's request as April 28, rather than April 25. Notwithstanding this inadvertent typographical error, the certification is for the responses which are enclosed.

312207

If you have any questions or comments, feel free to contact Mrs. Burroughs at (609) 584-3000 or me.

Very truly yours,

Norman W. Spindel

NWS:es
Enclosure
cc: Mrs. Michele B. Burroughs (w/ enc.)

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

MS. MICHELLE BURROUGHS
CONGOLEUM CORPORATION
BOX 3127
MERCERVILLE, NJ 08619

4a. Article Number

P 369 824 832

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

4-30-96

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*

X M. A. Cagona

8. Addressee's Address *(Only if requested and fee is paid)*

PS Form **3811**, December 1994

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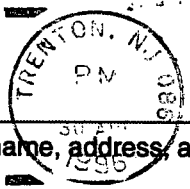

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MR. PAUL L. KAHN
U.S. ENVIRONMENTAL PROTECTION AGENCY
2890 WOODBRIDGE AVENUE
BLDG. 209, MS-211
EDISON, NJ 08837-3679

82

609-584-3000

Response of Congoleum Corporation to United States Environmental Protection Agency Region II's Request, Dated April 25, 1996, for Information Pursuant to Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9604

GENERAL OBJECTIONS AND COMMENTS

1. Congoleum Corporation ("Congoleum" or the "Company") objects to the information request to the extent it is overly broad, or seeks ancient or otherwise irrelevant information, the production of which is unduly burdensome and the value of which is minimal given the United States Environmental Protection Agency's (the "Agency" or "USEPA") authority under CERCLA §104(e)(1) to obtain information only "for the purposes of determining the need for response, or choosing or taking any response action under this subchapter or otherwise enforcing the provisions of the subchapter".[1]

2. Congoleum objects to the information request to the extent it requires production of information or documents that contain attorney work product or that are covered by the attorney-client privilege.

3. Congoleum objects to the request to provide the home address and telephone number of any individual who remains employed by Congoleum and for which the business address and telephone number is provided.

4. Although Congoleum is providing responses to the information request, these responses do not constitute a waiver by Congoleum of its rights to challenge USEPA's authority to issue the request for information.

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[1]Congoleum notes that the information requested goes well beyond the authority contained in CERCLA §104(e)(2) specifying the following types of information which USEPA may obtain:

(a) identification, nature and quantity of materials which have been or are generated, treated, stored, or disposed of at a ... facility,

(b) the nature or extent of a release or threatened release of a hazardous substance or pollutant or contaminant at or from a .... facility, or

(c) information relating to the ability of a person to pay for or to perform a cleanup.

CONGOLEUM'S RESPONSES

1. *What is the legal name of your company? What was the legal name of your company at the time of the release?*

   Response: The legal name of the company presently is, and at the time of the release was, Congoleum Corporation.

2. *Did your company operate the facility at 861 Sloan Avenue, Mercerville, New Jersey (herein the "Facility") at the time of the release? If not, please explain who did operate the facility at the time of release?*

   Response: At the time of release, Congoleum owned and operated the Facility.

3. *How long has the entity identified in Question 2 operated at the Facility?*

   Response: Based on available information, Congoleum and its predecessors have operated this Facility since 1953.

4. *Is the business incorporated? If yes, provide the state and date of incorporation. Please also provide the name of the President, Chairman of the Board, and Chief Executive Officer.*

   Response: Congoleum objects to this request on the grounds stated in General Objection 1. Without waiving this objection, Congoleum responds that it was incorporated in the State of Delaware on April 16, 1986. The President, Chairman of the Board and Chief Executive Officer of Congoleum is Roger S. Marcus.

6. *How much land does the facility occupy?*

   Response: The facility occupies 68.225 acres.

7. *Provide the mailing and street address of the Facility. Also, please provide a detailed description of the land area, including the block and lot number and a narrative description of its boundaries and borders.*

Response: The street address of the Facility is 861 Sloan Avenue, Hamilton Township, New Jersey. The Facility's mailing address is P.O. Box 3127, Mercerville, New Jersey 08619.

To the north of the Facility is Plasti-glass, a plastics and glass molding operation and a Federal Express distribution center. Along the eastern border of the property is a wooded area and Interstate 295. To the south of the Facility is a span of densely wooded land which extends up to 1/3 of a mile. Along the western edge of the property lies another wooded area.

8. *If your company is a subsidiary, identify the parent company and other related entities and state the name(s) and addresses of such entities' President, Chairman of the Board, and Chief Executive Officer.*

Response: Congoleum objects to this request on the grounds stated in General Objection 1. Without waiving this objection, Congoleum responds that it is a 44%-owned subsidiary of American Biltrite Inc. The headquarters of American Biltrite Inc. is 57 River Road, Wellesley Hills, MA 02181. The Chairman of the Board and the Chief Executive Officer of American Biltrite Inc. is Roger S. Marcus. The President of American Biltrite Inc. is Richard G. Marcus.

9. *How many employees were employed at the Facility at the time of the release or threat of release? Provide the name, address, and phone number of the Facility's supervisor, manager or equivalent.*

Response: At the time of the release there were approximately 345 employees working at this location. The plant manager, Mr. David W. Bushar, can be contacted at the Facility at (609) 584-3000; correspondence can be sent to the address provided in response to Question 7.

10. *What is the primary Standard Industrial Classification (SIC) Code for the Facility.*

Response: The SIC code for the Facility is 3996.

11. *Using your best professional judgment, provide estimates for each chemical released (in pounds) to each media for the release that occurred on or about October 24, 1995. Quantities released to each media should add up to the total quantity released.*

Chemical Name: 2-Butanone; also known as Methyl ethyl ketone or MEK

CAS Number: 78-93-3

Concentration (wt %):98-100

Physical state of the chemical
at the time of release: Liquid

Released To:	Quantity (lbs.)
Air	0
Surface Water	0
Land	0
Treatment Facility	0
Ground Water	6,800 - 7,000
Total Quantity Released	6,800 - 7,000

The quantity designated as "released" has been estimated using information available to the Company and is Congoleum's present best estimate of the amount of MEK involved in this incident.

12. *Please supply the following information for each release:*

Date/Time Release Began:	Unknown; (month/day/year)	Unknown (24-hr clock)
Ended:	10/25/95; (month/day/year)	Unknown (24-hr clock)

13. *Did any substance identified in Question 11 migrate beyond*

a) *The confines of an enclosed structure?*

b) *the legal boundaries of your Facility (for example, a vapor release carried by prevailing winds)?*

What is the basis for you answer to questions 13.a. and b., and what methodologies were used to determine the answer to questions 13.a and b? (For example, by observation and/or use of monitoring equipment)?

Response: The substance identified in Question 11 migrated beyond the confines of an enclosed structure (the underground pipe). The substance did not migrate beyond the legal boundaries of the Facility. The bases for this statement are analysis of analytical data from soil borings, groundwater data, and the localized direction of groundwater flow.

14. *Did this release migrate to another state or county? If yes, identify them. Provide the basis for your answer to this question.*

Response: No.

15. *Identify the neighboring state(s).*

Response: Not applicable; see response to Question 14.

16. *How close is your facility to the neighboring states.*

Response: See response to Question 15.

17. a) *Were federal authorities notified?*
b) *If yes, please indicate which federal authorities were notified.*

Response: Yes, the National Response Center (phone number 800-424-8802) was notified on November 10, 1995 at approximately 15:50 hours. Notice was provided at this time on the basis of the following.

During normal operations on October 24, 1995, visual observation of a capacity gauge on the MEK reclaim tank indicated a lowering of approximately one inch in the tank level during operations in the morning. This would correspond to a deficiency of approximately 300 gallons. In addition, the level of the tank was checked by manually "sticking" the tank to determine the level of material in the tank. The apparent drop in tank inventory was reported to appropriate personnel. Thereafter, the manufacturing operation was terminated and an investigation of the missing inventory commenced.

Following the indication that a release of approximately 300 gallons of MEK had occurred, Congoleum undertook an audit of its records in an attempt to verify its estimate of missing MEK. As of the afternoon of November 10, 1995, the audit had been completed and the results "confirmed" by field observations. At this time, it appeared that approximately 600 gallons (approximately 4,000 pounds) were unaccounted for in the inventory. The estimated amount derived as a result of the audit was supported by a calculation of MEK recovered by a recovery well and contained in soils excavated during the Company's immediate response to the discovery of missing MEK. Inasmuch as the Company's best estimate of 4,000 pounds was approximately 80% of the threshold reporting quantity of 5,000 pounds of MEK and there were other indications that MEK remained unrecovered, a decision was made in the afternoon of November 10 to contact the National Response Center and the appropriate local authorities. Also see response to Question 25.

18. a) *Were all appropriate State Emergency Response Commissions ("SERCs") notified?*

b) *If yes, please indicate which SERCs were notified.*

Response: Yes; see response to Question 17. The New Jersey Department of Environmental Protection ("NJDEP") Hotline [(609) 292-7172] was called on October 24, 1995 at 16:57 hours to report that Congoleum had reason to believe that a loss of 300 gallons (approximately 2,000 lbs) of MEK presumably to groundwater had occurred. This call was made at this time because New Jersey does not utilize quantity thresholds for reporting purposes.

19. a) *Were all appropriate Local Emergency Planning Committees ("LEPCs") notified?*

b) *If yes, please indicate which LEPCs were notified.*

Response: Yes; see response to Question 17. A call was made on November 10, 1995 at approximately 15:35 hours to Mr. Walter Bronek, Chief, Hazardous Materials Response, Hamilton Township, but there was no pick-up on the hot-line. (Government offices were closed in New Jersey on this date in observance of Veterans' Day.) A letter was mailed certified mail that day to inform the LEPC of the potential exceedance of the threshold reporting quantity. Enclosed as Attachment 1 is a copy of the letter and proof of receipt. In addition, the LEPC was called the following week again to inform it of the discharge.

20. *Was a written follow-up notice provided to the SERC(s) and the LEPC(s) pursuant to Section 304(c) of EPCRA? Indicate to whom the follow-up notices were sent and provide copies of such notices and proof of mailing.*

Response: A written follow-up notice was mailed to NJDEP in compliance with NJDEP's requirements for providing such notice. This notice dated November 22, 1996, submitted within 14 days of the completion of Congoleum's inventory review and at the conclusion of immediate field response activities, was provided at the earliest practicable time when relevant information was known to the Company. The LEPC and other State agencies were copied on the correspondence. Copies of the notice and proof of receipt of the mailings are enclosed as Attachment 2.

21. *Provide the date and time when you first discovered the release.*

Response: On October 24, 1995, at approximately 16:40 hours, Congoleum personnel observed conditions that strongly indicated that it was likely that a section of underground piping was not holding pressure and that the integrity of the piping was compromised. At this time, the inventory loss was estimated to be approximately 300 gallons of MEK (approximately 2,000 lbs) to groundwater.

22. *How was the subject release first discovered? (Discovery includes, but is not limited to, process control device indication, chemical specific alarm, observation by an employee, explosion/fire). Provide all available documents, descriptions and data to support your answer, including names and phone numbers of all persons who first discovered the release.*

Response: See response to Question 17. The person who first noticed a drop in the reclaim tank gauge reading was Mr. Wayne Gursky, Administrator - Color. Mr. Gursky can be contacted at Congoleum's phone number.

The tanks and the pumps were visibly inspected to determine if there were any leaks at the tank farm. There were no visible leaks from the tanks nor the pumps. The MEK lines were blind flanged at the pumps in order to isolate the piping for pressure testing. The lines were pressurized, but slowly lost pressure. Thereafter, above-ground piping suspended on the side of the building was visually inspected to determine whether bubbling out of any holes or cracks in the piping was noticeable, or if there were any puddles or odors of MEK along the lines. The lines were pressurized several times during this phase of the investigation. No indications that the pipes were leaking were observed. Because no above-ground leaks were noted to account for the apparent inventory loss, it was speculated that a discharge had occurred in the section of piping located below-ground. This conclusion was reached at 16:40 hours on October 24. Because, at that time, the best information available to Congoleum was that approximately 300 gallons were missing (and assumed to have been discharged below ground), the loss of this amount of material was reported to NJDEP at 16:57 hours as a discharge to groundwater.

23. *Was a detection system or chemical release alarm in place at the time of the incident? If yes, please describe the alarm system and how it was triggered?*

Response: Mr. Gursky's duties included daily inspections of various tanks and related equipment associated with the use of inks and Congoleum's manufacturing process. The MEK reclaim tank is one of the tanks Mr. Gursky inspected daily. In addition to inspecting the tank, Mr. Gursky checked the gauge on the reclaim tank.

24. *Provide a chronological description of the events that led up to and contributed to the release. If helpful, include a sketch.*

Response: The underground piping was installed in 1984 when there was an extension to the building constructed; the piping was buried at a depth of approximately four (4) feet from the surface. At the time of installation, the piping was coated and wrapped to prevent corrosion. As part of the response activities that were performed in October/November 1995, evidence of the pipe wrapping was visible when the pipe was exposed in order to determine the exact location where the pipe was compromised. When the pipe was exposed, a hole in the pipe was observed. In addition, the pipe was bent in the area where the hole in the pipe was discovered, indicating that the pipe may have been damaged or bent when installed in 1984 by contractors.

Another potential contributing factor to the compromise of the integrity of the piping was the use of a tow motor driving on the gravel and fill covering the piping the prior week. This machine was utilized during the installation of a new piece of equipment approximately ten (10) feet away from the hole in the pipe.

25. *In determining the extent of the release, what technique was employed to quantify the release. Provide copies of all calculations performed and identify what was estimated and the reliability of such estimates.*

Response: When the incident was first discovered on October 24, 1995, Mr. Gursky used his professional judgment to estimate how much material was lost from the tank. This estimation was based on the initial level of the tank as reflected by the gauge reading, the level of the tank later that day as reflected by manual reading of the tank volume, and consideration of the volumes added to the tank from the reclaim system.

Due to the "invisible" nature of the release and the impossibility of establishing when the release began, Congoleum initiated an audit of the bulk inventories, transfers to other departments, the generation of mixed inks (batch process), the reclaim inventory and the amount of product produced during the month of October. Congoleum first calculated the year-to-date average consumption of MEK per square yard of sheet goods printed based on bulk inventories. This "average" consumption was used to estimate MEK consumption based on the total square yards printed during October. Work-in-Process MEK, including that contained in inks which were mixed during October but not used to print product due to production changes, accumulated inventory of press clean-up wastes awaiting reclaim, and transfers to other departments were totaled and added to the calculated printing consumption. This total was then compared to the difference between the end of the month inventory and the beginning of the month inventory. The estimated loss from inventory using this method was approximately 4,000 pounds.

In addition, by November 10, 1996, Congoleum Corporation had pumped approximately 40,000 gallons of contaminated groundwater from the recovery well installed as part of its response action on October 26, 1995. Based on early analytical results of MEK concentration in the recovered water, Congoleum estimated that it had recovered approximately 4,000 pounds of MEK as of this date. On November 10, 1995, soil borings and groundwater sampling was performed by GHR Consulting Services to delineate the affected areas. Based on free product discovered in two of the groundwater samples, it was assumed that the release was greater than 4,000 pounds, and an estimated release of 4,500-6,000 pounds of MEK was reported to the appropriate authorities.

See attached spreadsheet for calculations (Attachment 3). Note that as of November 15, 1996, approximately 3,500 pounds of MEK contained in groundwater had been shipped from the site.

26. *Describe the immediate response activities taken to mitigate the incident.*

Response: Immediately after determining on October 24, 1995 that a leak in the underground pipes may be occurring, the Company ceased using the piping. On October 25, 1995, Congoleum exposed a section of the underground piping near where recent construction had occurred. Contaminated soils encountered during the excavation process were segregated, placed on plastic, and latter drummed for disposal. At approximately 12:00 hours, the piping was exposed in a perpendicular direction from the building foundation for a distance of approximately 10 feet and then parallel to the building for approximately 15 feet. The excavation was left open from approximately 11:45 until 12:30. Upon returning to the excavation, it was discovered that liquid had accumulated in the bottom of the excavation. A sample of the liquid was taken from the excavation and sent to the Company's R&D laboratory for confirmation of the presence of suspected MEK.

Pipe clamps were placed over the hole in the exposed pipe, the blind flange removed from the MEK pump and piping fitting, and the MEK lines re-pressurized from the press room back to the MEK tanks to recover as much of the MEK from the lines as possible. The excavation then was filled in with the clean fill.

Early on October 26, 1995, GHR Consulting Services was retained to install an emergency recovery well to minimize the environmental impact. The emergency well permit was obtained by that afternoon with the assistance of ISRA case manager Mr. John King. The well was installed by 19:00 that evening. A 20,000 gallon portable tank was delivered on October 27, 1995 and Congoleum commenced pumping groundwater.

Following immediate response actions, delineation activities were conducted. Upon detection of free product in two locations, 1 inch wells were installed in these locations. Congoleum commenced pumping groundwater from these wells on November 14, 1995 after obtaining the proper equipment.

A total of 70,686 gallons of contaminated groundwater was pumped from the three recovery wells between October 27, 1995 through January 25, 1996. In late January, Mr. King visited the Facility in connection with the ISRA case and questioned why so much groundwater had been pumped. In light of his question and Congoleum's belief that the minimal amount of residual MEK would biodegrade, active pumping was terminated at the end of January. Based on samples obtained from the recovered groundwater as of the end of January, it was estimated that approximately 6,600 pounds of MEK had been recovered from groundwater. At present, it is believed that 6,800 - 7,000 pounds were released.

See Attachment 3 for quantities of MEK in groundwater for the entire period.

27. *Describe the actions taken to prevent such a release from occurring in the future.*

Response: Congoleum installed above ground piping lines to replace the shutdown underground piping, and labeled the pipes. These pipes are visibly inspected. The tanks and visible pipes are inspected on a daily basis during production. Visible inspection of the tanks for leaks is performed by security guards on weekends during their clock-rounds. Based on the distinct odor of MEK, a small surface leak would be noticeable and will be immediately investigated by on-site personnel. In addition, flow totalizers were added to the exit pipe from the virgin MEK tank, the reclaim MEK tank, and from the still to the reclaim tank.

28. *Who was responsible for the investigation of the release?*

Response: The following personnel participated in investigation of the release.

Mr. David Bushar - Plant Manager
Mr. Chris Phillips - Maintenance Manager
Mr. Fred Hendrickson - Manager of Rotogravure Production
Mrs. Michele Burroughs - Director of Environmental Affairs

29. *Were written standard operating procedures ("SOPS") available to plant personnel at the time of the release which detail the actions to be taken in case of a release or malfunction? Please send copies of the appropriate SOPs.*

Response: Yes, there were instructions for the daily and weekly inspection of the process areas, tanks and their appurtenant piping at the time of the release. Upon discovery of a release, the department supervisor must be notified and corrective action initiated. Relevant documents are included as Attachment 4.

30. *Was the general public notified of the release? If yes, how and when was the notification made.*

Response: The general public was not notified of the release.

31. *Were any persons injured or hospitalized as result of the release? If yes, please list the number of persons, their role at the scene and the extent of their injuries.*

Response: There were no people injured or hospitalized as a result of the release.

32. *Was there an evacuation in response to the release? If yes, how was the evacuation accomplished and how many people were evacuated?*

Response: There was no evacuation in response to the release.

33. *If this response, or information previously submitted to EPA regarding the quantity of the release, differs from your report to the NRC, SERC(s) or the LEPC(s), explain the differences and their bases.*

Response: In the confirmation letter, dated November 22, 1995, sent to NJDEP (and copied to other State agencies and the LEPC), Congoleum stated that it was possible that in fact the Reportable Quantity may not have been exceeded based on analytical data received from a certified laboratory as of November 22. Congoleum pumped groundwater intermittently from October 25, 1995 through January 25, 1995. A total of 70,686 gallons were pumped.

Samples of every load of groundwater sent to an off-site TSDF were taken to quantify the amount of MEK recovered from the groundwater. Assuming that the samples taken from the top of the tanker truck were representative of the entire load, Congoleum now estimates that approximately 6,600 gallons of MEK were recovered.

In addition, it was discovered that there were several typographical errors in the written letter report dated November 22, 1995. In the report, Congoleum stated that the delineation occurred on November 11, 1995 and the NRC and the LEPC were contacted to report the release on November 11, 1995. The delineation and the reporting actually occurred on November 10, 1995. Also the report referenced a letter from GHR Consultants regarding the delineation activities, and stated that the letter was dated November 11, 1995. The letter, in fact, was dated November 14, 1995. Finally, there was a typographical error in the GHR letter dated November 14, 1995 in which the consultant stated that the delineation activities occurred on November 11, 1995. These activities were performed on November 10, 1995. Attachment 5 is a letter from GHR correcting the typographical error in its original letter.

34. *For each and every question contained herein, if information or documentation responsive to the "Information Request" is not in your possession, custody or control, identify the persons from whom such information can be obtained.*

Response: Not applicable.

State of New Jersey :

: CERTIFICATION OF MICHELE B. BURROUGHS

County of Mercer :

I certify that I have examined and am familiar with the information submitted in the Response of Congoleum Corporation to the United States Environmental Protection Agency Region II's Request, dated April 28, 1996, for Information Pursuant to Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act, and that I believe that the submitted information is true, accurate and complete to the best of my knowledge. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine or imprisonment.

Michele B. Burroughs

Michele B. Burroughs
Director of Environmental Affairs, NJ

Sworn to me this 24
day of May, 1996.

J. Battiste

Notary Public

JOSEPH J. BATTISTE
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires August 26, 2000

05/23/960242146.01

Attachment 1 to
Response of Congoleum Corporation to United States Environmental Protection Agency Region II's Request, Dated April 25, 1996, for Information Pursuant to Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9604

Congoleum® CORPORATION

November 10, 1995

Mr. Walter Bronek
Chief Hazardous Materials Response
Township of Hamilton
Office of Emergency Management
240 Tampa Avenue
Hamilton, NJ 08610

Re: Congoleum Corporation
861 Sloan Avenue
Hamilton Township
MEK Discharge
NJDEP Case No 95-10-24-1657-49
National Response Center Incident # 313 756

Dear Mr. Bronek:

This letter is to inform you that Congoleum Corporation called your office today at 3:35 pm to inform you that Congoleum Corporation had a discharge of MEK to groundwater which potentially may exceed the reportable quantity of 5,000 lbs. I assume that your office was closed today for Veteran's Day due to the fact that no one answered the phone. Congoleum Corporation is working with NJDEP to cleanup the groundwater and there is no immediate threat to human health from this incident. If you have any questions regarding this incident, please contact me at (609) 584-3000.

Sincerely,

Michele B. Burroughs

Michele B. Burroughs
Director of Environmental Affairs, NJ

Via Certified Mail Z 070 793 142/
Return Receipt Requested

bc: R. Agate
P. Rohrbacher
N. Spindel, Lowenstein, Sandler, Kohl, Fisher & Boylan

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "*Return Receipt Requested*" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Walter Bronk
Township of Hamilton
240 Tampa Ave
Hamilton, NJ 08610

4a. Article Number
Z 070 793 142

4b. Service Type
☐ Registered ☑ Certified
☐ Express Mail ☐ Insured
☑ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
11-14-95

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

NOV 14 1995

PS Form 3811, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

Attachment 2 to
Response of Congoleum Corporation to United States Environmental Protection Agency Region II's Request, Dated April 25, 1996, for Information Pursuant to Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9604

Congoleum®
CORPORATION

November 22, 1995

Bureau of Discharge Prevention
NJ Department of Environmental Protection
401 East State Street
CN 027
Trenton, NJ 08625-0027
Attention: Discharge Confirmation Report

RE: Congoleum Corporation
861 Sloan Avenue
Hamilton Township
Case #95-10-24-1657-49
National Response Center Incident # 313 756
ISRA Case # 84137

Dear Sir or Madam:

In accordance with NJAC 7:1E-5.8(b), Congoleum Corporation is submitting this discharge confirmation report within thirty (30) days of the above referenced notification to the Department. The person responsible for the initial notice to the NJDEP hotline and this written notification is Mrs. Michele Burroughs located at Congoleum Corporation, PO Box 3127, 1945 East State Street, Mercerville, NJ 08619; phone number (609) 584-3000. The owner and operator of this facility is Congoleum Corporation, PO Box 3127, Mercerville, NJ 08619; phone number (609) 584-3000.

The discharge was reported to the Department on October 24, 1995 and assigned Case #95-10-24-1657-49. The discharge resulted from a damaged 1.5 inch pipe located approximately four (4) feet below grade which contained 2-Butanone, also known as Methyl ethyl ketone or MEK. The discharge was detected when there was a quantifiable drop in the reclaim tank inventory of 300 gallons which was first noted on October 24, 1995. Plant personnel isolated the piping from the tank and pressure tested the lines from the point of use. The MEK lines did not hold pressure. The lines were repressurized and all above ground lines were visually inspected for leaks. When there were no observed leaks in the above ground lines, it was presumed that there was a compromise in the integrity of the piping section which was below grade. The Department was notified of the discharge of 300 gallons to groundwater within fifteen minutes of the final pressure test of the lines.

Following discovery of the release, Congoleum audited its records and, on November 11, 1995, estimated that 600 gallons (approximately 4,000 lbs) was missing from the inventory and was presumably discharged to the groundwater. Based on the free product discovered during delineation, and the estimated amount of groundwater containing approximately 4,000 lbs of MEK which had already been pumped to the portable 20,000 gallon Baker tanks, Congoleum

concluded on this date that there was potentially a total release of more than the threshold reporting quantity of 5,000 lbs for MEK. On November 11, 1995, Congoleum Corporation attempted to contact the local LEPC but was unsuccessful in reaching anyone at phone number for the Hamilton Township Hazardous Materials Response Team, presumably due to office closure for the Veteran's Day holiday. The National Response Center was contacted to report that between 4500 lbs and 6000 lbs of 2-Butanone was discharged to groundwater. Congoleum Corporation cross referenced the NJDEP Discharge Case number and stated that we were working with the Department (ISRA) which was expediting the issuance of recovery well permits. Based on additional analytical information received on the material in the Baker Tanks, it now appears that Congoleum Corporation's notification to the National Response Center was not required because these analytical results indicate that the threshold was not likely reached.

The location of the discharge is as follows:

Facility:	Congoleum Corporation 861 Sloan Avenue Hamilton Township, Mercer County Tax Lot: 2 Block: 89 US EPA ID NJD080796782 Site Map: See attached
Discharge Information:	
Source:	Damaged underground section of piping from an AST system Discharge to groundwater
Location:	Latitude: 40 degrees 15 minutes 5 seconds Longitude: 74 degrees 42 minutes 5 seconds
Material:	2-Butanone, also known as Methyl ethyl ketone or MEK Chemical Abstract Service (CAS) Number: 78-93-3
Estimated quantity discharged:	4,500-6,000 lbs
Time in which discharge began:	Unknown
Time that discharge was discovered:	4:40 pm on October 24, 1995
Date that discharge ended:	October 25, 1995 - when pipe was pressurized back to the tank to empty the lines. Lines will be closed in place by capping or blind flanging and labeled as to origin.

On October 25, Ireland Excavation was contracted by Congoleum Corporation to expose the piping in order to assist Congoleum personnel's visual confirmation that the pipe integrity was in fact compromised and to identify the exact location of the discharge. Approximately ten (10) feet of the piping run was exposed perpendicular to the building and another ten (10) feet piping run was exposed which ran parallel to the building. The piping was located at approximately four (4) feet below grade. The location was chosen due to the fact that there was construction in this area the prior week which required heavy equipment to run over the buried piping. Congoleum personnel confirmed that there was a compromise to the integrity of the 1.5 inch line at approximately five (5) feet from the building foundation in the piping run which ran perpendicular to the building foundation. A pipe clamp was placed over the hole in the pipe so that the MEK in the pipe could be pressurized back to the tank from inside the plant to the tank in order to minimize additional MEK discharge from the pipe. A liquid sample was collected from the excavation and sent to our company laboratory for confirmation. Due to concerns regarding the

containing a flammable liquid to the plant access road and Sloan Avenue, the excavation was filled in and a marker place near the elbow between the two exposed piping runs.

During the excavation of the soils to reveal the piping, contaminated soils were encountered at approximately 2.5 feet below grade. The soils excavated between 2.5 feet and 4 feet were segregated, placed on plastic, covered with plastic and later drummed and labeled. Eleven drums of the soils contaminated with MEK were generated from the excavation process. These drums will be shipped to an approved TSDF at a later time.

Containment and Clean-up Measures

On October 26, Congoleum Corporation contacted GHR Consulting Services Inc. to provide support for the clean-up and requested emergency installation of a recovery well near the location of the broken pipe. GHR Consulting Services contacted Mr. John King, ISRA Case Manager for the facility to request assistance in obtaining an emergency well permit. Well permit 2836949 was obtained on October 26, 1995 by SBI Environmental Well Drillers and the well installed by 6:30 pm that night. On October 27, the well was bailed and found to have approximately six inches of free product in the well. An above-ground, portable 20,000 gallon Baker Tank was leased and delivered that day. Ground water pumping has occurred intermittently since October 27. The pumping was intermittent due to mechanical problems with the pump, and the logistical problems of handling groundwater contaminated with flammable material in the area where new overhead lines were being welded.

On November 11, 1995, GHR Consulting Services Inc. and Environmental Probing Investigations (EPI) conducted delineation activities at the facility. "GHR and EPI advanced sixteen soil borings to an average depth of 4.5 feet below the ground surface. The groundwater table was encountered at approximately 3.5 feet below the ground surface. Four temporary one-inch well points were advanced into the bore holes to gauge for free product MEK. The temporary well points were removed upon the gauging of each well point. Upon discovery of several inches (approximately six inches) of free product in one of the well points situated immediately north of the loading dock, EPI advanced and set one permanent 1 inch well point to necessitate immediate free product recovery."[1] On November 14, Congoleum commenced pumping product from the one inch well. On November 16, "EPI advanced and set a second permanent 1 inch well at the eastern corner of the loading dock to monitor the discovered free product contaminant plume. The well permit numbers are 2837035 and 2837036 and located at approximately 74° 42' 5" west longitude and 40° 15' 5" north latitude. GHR collected nine confirmatory soil samples from the various boreholes to document the extent of soil and groundwater contamination."[1]

"As a result of the field screening conducted by GHR during the advancement of soil borings, it was determined that the MEK contaminant plume appears to be confined to the northern edge of the building foundation from the point of the 4" recovery well to approximately 20'-25' in an easterly direction. The plume appears to be approximately 10' in width and seems to be traveling along the outer building foundation. Laboratory analytical results will be forthcoming and will be summarized in a brief letter report along with the boring logs."[1]

1. Letter from M. Williams, GHR Consulting Services Inc. to M. Burroughs, Congoleum Corporation, dated November 11, 1995.

Below is a list of the entities which have been involved in the delineation, and clean-up, and removal of the contaminated groundwater. The address and phone number of GHR Consulting Services Inc. is:

GHR Consulting Services Inc.
300 Welsh Road, Bldg 3, Suite 110
Horsham, PA 19044-2209
(215) 784-9500

The address and phone number of SBI Environmental Well Driller, the firm responsible for installation of the 4 inch recovery well is:

SBI Environmental Well Drillers
17 Demarest Drive
Wayne, NJ 07470-6744
(201) 305-0022

The address and phone number of Environmental Probing Investigations, Inc., the firm responsible for operating the drill rig for the delineation sampling and installation of two additional wells is:

Environmental Probing Investigations, Inc.
5242 Meadowbrook Place
Pipersville, PA 18947
(215) 766-9925

There are no anticipated acute or chronic health risks associated with this occurrence. Qualified professionals have been retained, as discussed above, to respond to this incident.

To date, there have been 46,700 gallons of groundwater containing MEK shipped off-site for treatment to DuPont Chambers Works and an estimated additional 20,000 gallons in the Baker tanks. The hauler has been requested to extract a sample from every load and to have the sample analyzed for MEK concentration at a certified laboratory. To date, Congoleum Corporation has not received the analytical results from any of the shipments. Congoleum Corporation estimates that $45,000 has been spent on clean-up activities to date.

In satisfaction of NJAC 7:1E-5.8(b)16, the complete results of the analyses performed to date will be forwarded in a later report to Mr. John King, ISRA Case Manager for this facility, when they are available. To the extent such report is not provided within the thirty day regulatory period, Congoleum Corporation requests an extension as provided in the regulations and will assume such extension unless Congoleum Corporation is otherwise notified by NJDEP.

Corrective Actions

Congoleum Corporation ceased using the compromised MEK lines on October 24th. The lines were pressurized back to the tank from the point of use to empty the lines which will be closed in place. The plant is continuing to operate by unloading from the tanks to drums. New overhead lines are presently being installed and will tie into the existing overhead lines at a cost of $40,000. In addition, flow meters will be added at the discharge point of the Virgin MEK tank and the

Reclaim Tank, and from the reclaim still to the Reclaim Tank. The approximate cost of the flowmeters installed is $5,000.

Additional Reporting

Due to the fact that this site is undergoing an ISRA investigation and the ISRA Case Manager has been involved with expediting the issuance of the recovery well permits for this discharge, Congoleum Corporation will implement future actions as part of the ongoing ISRA Case, and will provide all future reports, including the analytical results of the sampling, etc., only to the ISRA Case Manager. Congoleum Corporation will assume that this is acceptable to the Department unless it is otherwise notified.

If you have any questions, please contact me.

Sincerely,

Michele B. Burroughs

Michele B. Burroughs
Director of Environmental Affairs
New Jersey

Via Certified Mail Z 070 793 147/
Return Receipt Requested

xc: Mr. Walter Bronek
Township of Hamilton
Hazardous Materials Response Team
CN 00150
Hamilton, NJ 08650
Certified Mail Z 070 793 148/
Return Receipt Requested

Ms. Shirlee Schiffman
Safety, Health, and Analytical Programs
Bureau of Hazardous Substances Information
NJDEP
CN 405
Trenton, NJ 08625
Certified Mail Z 070 793 149/
Return Receipt Requested

Major James Momm
NJ State Police
Office of Emergency Management
PO Box 7068
River Road
West Trenton, NJ 08628-0068
Certified Mail Z 070 793 150/
Return Receipt Requested

CERTIFICATION

The following certifications are in full accordance with New Jersey Administrative Code Title 7, Chapter 1E, Section 4.11 and Section 5.8(b)17 for the certification of the Discharge Confirmation Report.

"I certify under penalty of law that the information provided in this document is true, accurate, and complete. I am aware that there are significant civil and criminal penalties, including fines or imprisonment or both, for submitting false, inaccurate or incomplete information."

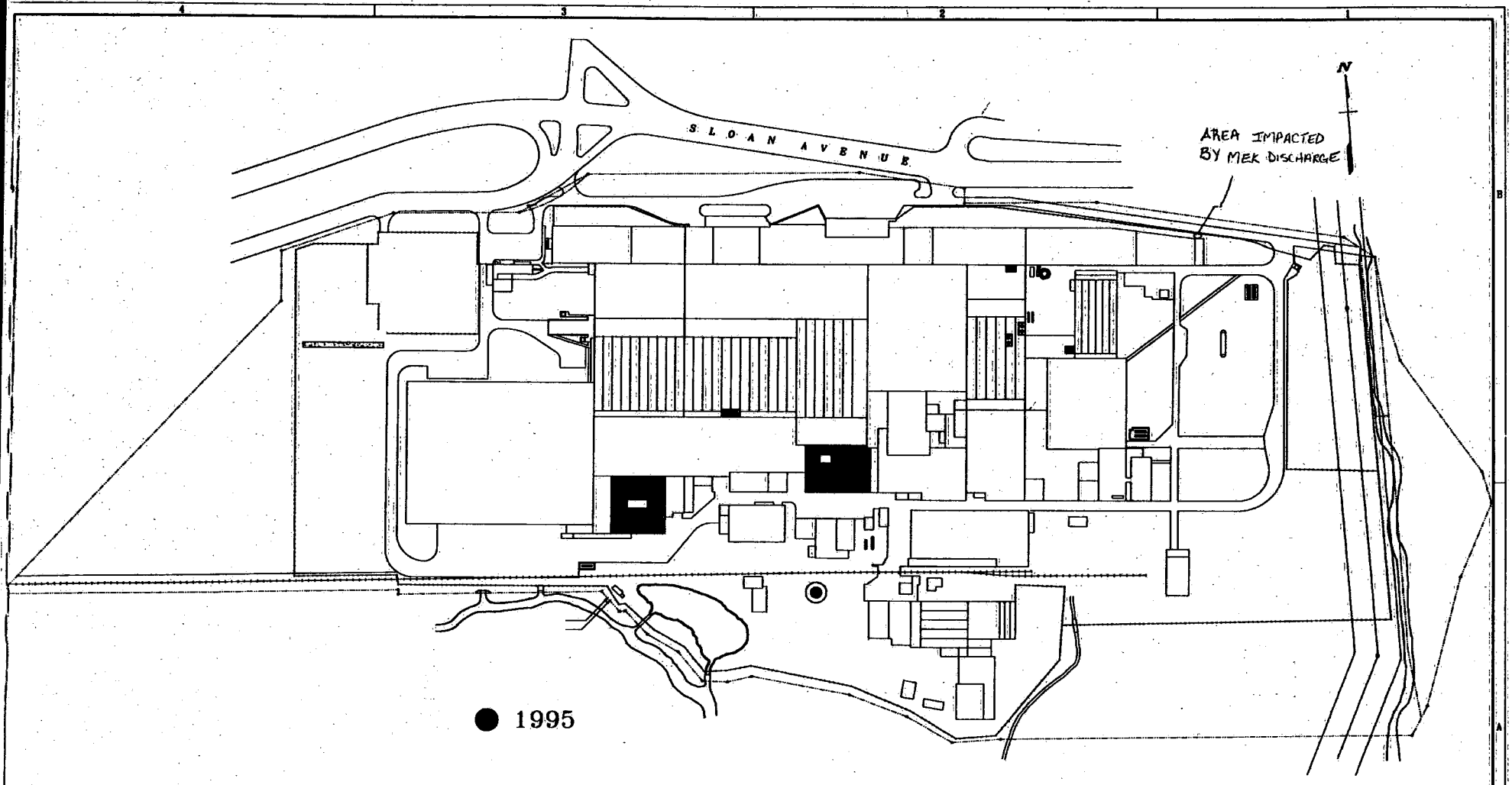
"I hereby certify that financial responsibility demonstrated pursuant to NJAC 7:1E-4.5 and submitted to the Department pursuant to NJAC 7:1E-4.4(a)9 is in full force and effect."

Robert N. Agate
Signature

Robert N. Agate
Name

Senior Vice President of Manufacturing
Title

November 22, 1995
Date



THIS DRAWING IS THE PROPERTY OF CONGOLEUM CORPORATION. IT IS LOANED AND ACCEPTED ON THE EXPRESS CONDITIONS THAT IT WILL BE TREATED AS CONFIDENTIAL INFORMATION, THAT IT WILL BE USED ONLY FOR THE PURPOSE FOR WHICH IT IS LOANED, THAT IT WILL NOT BE COPIED OR USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY, AND THAT IT WILL BE RETURNED UPON REQUEST.

DR'N BY	ROBERT F. STRATTON	DATE	11-18-94
CH'D BY		DATE	

TOLERANCES UNLESS OTHERWISE NOTED
FRACTIONAL +/- 1/32
DECIMAL DIMENSIONS +/- .010
ANGULAR 2 DEG.
SURFACE FINISH 125

RELEASE DATES
PRELIMINARY
CERTIFIED
FCA NO.
PROJECT NO

Congoleum CORPORATION
RIDGE RD. & YATES AVE., MARCUS HOOK, PA. 19061
PLANT TRENTON #1 BLDG. ALL

TITLE: PLOT PLAN
TRENTON PLANT #1
WITH PROPERTY LINES

SCALE 1"=100' DWG NO. D-1569.1

D-1569.1 1=200

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Bureau of Discharge Prevention
CN 027
Trenton, NJ 08625
STATE OF NEW JERSEY

4a. Article Number
Z 070 793 147

4b. Service Type
☐ Registered ☑ Certified
☐ Express Mail ☐ Insured
☑ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: (Print Name) TRENTON, POST OFFICE

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X NOV 27 '95

PS Form 3811, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Walter Brosek
Township of Hamilton
CN 00150
Hamilton, NJ 08650

4a. Article Number
Z 070 793 148

4b. Service Type
☐ Registered ☑ Certified
☐ Express Mail ☐ Insured
☑ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
NOV 27 1995

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994 Domestic Return Receipt

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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Ms. Shirlee Schiffman
NJDEP
CN 405
Trenton, NJ 08625

4a. Article Number
Z 070 793 149

4b. Service Type
☐ Registered ☑ Certified
☐ Express Mail ☐ Insured
☑ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: (Print Name)
STATE OF NEW JERSEY
CAPITOL POST OFFICE

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X NOV 27 '95

PS Form 3811, December 1994 Domestic Return Receipt

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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Major James Morris
NJ State Police
PO Box 7068
W. Trenton, NJ 08628

4a. Article Number
Z 070 793 150

4b. Service Type
☐ Registered ☑ Certified
☐ Express Mail ☐ Insured
☑ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
11 27

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994 Domestic Return Receipt

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- Write "Return Receipt Requested" on the mailpiece below the article number.
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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. John Kay
NJDEP
CN 028
Trenton, NJ 08625

4a. Article Number
Z 070 793 151

4b. Service Type
☐ Registered ☑ Certified
☐ Express Mail ☐ Insured
☑ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: (Print Name)
STATE OF NEW JERSEY
CAPITOL POST OFFICE

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

Attachment 3 to
Response of Congoleum Corporation to United States Environmental Protection Agency Region II's Request, Dated April 25, 1996, for Information Pursuant to Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9604

CONGOLEUM CORPORATION
TRENTON PLANT #1
ANALYSIS OF INVENTORY - METHYL ETHYL KETONE

	Vendor Receipts (Lbs)	Issued to Production (Lbs)	Transfer (Lbs)	Calculated Balance (Lbs)	Physical Tank Inv. (Lbs)	Sq yards Printed	Average Lbs/Syd	Year-to-date Average * Lbs/Syd
Opening Balance 1-1-95					73906			
January		27164	337	46405		347676	0.078	
February	40880	22648		64637		295482	0.077	
March		32708		31929		325568	0.1	
April	40000	28618		43311		299592	0.096	
May	39420	32383		50348		343822	0.094	
June	39760	21556	674	67878		192734	0.112	
July	39400	19523		87755		135808	0.144	
August		13912	674	73169		130910	0.106	
September	41180	29462	371	84516		266082	0.111	0.102
October	40940	25728	1107	98621	86536	252238	0.102	

Note: Between 10/24 through 11/8, Plant 1 generated 11 drums of wash-up. Estimated accumulation of MEK press wash-up beteen 10/24-10/31 is 4 drums (contains 95% MEK)

Note 2: Average usage of MEK/Syd of flooring was calculated for the first 9 months of 1995 in order to calculate "Issued to production" for October 1995

	(lbs)	(gallons)
End of the month inv.	86536	12897
MEK in mixed inks for future use	6834	1018
4 drums of wash-up	1350	201
Total	94720	14116
Calculated balance	98621	14698
Loss due to release	3901	581

Note 3: No reclaim from 10/24-12/1/95
Month of October ran production standards - all new inks mixed. Tansferred 8,040 lbs of mixed inks containing 6,834 lbs of MEK to Ink Shed during October. Period between 10/24-11/8, Plant Production transferred MEK from tanks to drums to ink mix and press room

TABULATION OF MEK IN GROUNDWATER SENT TO DUPONT				
MANIFEST NUMBER	DATE SHIPPED	QUANTITY (GALLONS)	CONCENTRATION (%)	LBS OF MEK
NJA2203923	11/09/95	5400	0.7	313.74
NJA2203927	11/10/95	5200	0.8	345.28
NJA2203928	11/13/95	5200	0.8	345.28
NJA2203964	11/13/95	5400	1.4	627.48
NJA2203972	11/14/95	5300	1.7	747.83
NJA2203973	11/14/95	5200	0.9	388.44
NJA2203994	11/15/95	5000	1.8	747.00
NJA2204044	11/21/95	5000	1.6	664.00
NJA2204045	11/22/95	5000	1.7	705.50
NJA2203965	11/29/95	5000	1.8	747.00
NJA2203995	11/29/95	5000	1.9	788.50
NJA2204267	12/13/95	3900	0.13	42.08
NJA2294298	1/16/96	5000	0.12	49.80
NJA2294247	1/25/96	5086	0.16	67.54
TOTAL		70686		6579.47

Attachment 4 to
Response of Congoleum Corporation to United States Environmental Protection Agency Region II's Request, Dated April 25, 1996, for Information Pursuant to Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9604

INSTRUCTIONS FOR DAILY INSPECTIONS

This inspection form should be used for two weeks worth of inspections (10 week days).

Tank Inspections
Each tank inspection shall consist of a thorough investigation of the tank surface, valves, piping, flanges, and other connection devices for any evidence of free product. Inspect the secondary containment system for any deterioration. Check level gauge, and/or any other type of level or level alarm system for malfunctions. Initial after inspection.

Process Area Inspections
Inspections of process areas, including production and associated drum or totebin storage areas, shall consist of a thorough investigation of equipment, valves, pipes, etc. for evidence of free product. Storage areas should be clean. Drums or totebins should be kept clear of doorways leading outside in order to avoid spillage onto the land or into sewer drains. Initial after inspection.

Report to department supervisor any deficiencies immediately. The Plant Manager must initial and date all deficiencies within 24 hours of when they are found and initiate proper corrective action. Attach a copy of the work order with supervisor's signature verifying the work has been completed.

After two weeks of inspections, forward to Plant maintenance Manager's Office.

"To the best of my knowledge, all inspections have been done properly and any corrective actions have been tended to immediately, under direction by the Plant Manager."

Plant Maintenance Manager

DAILY STORAGE/PROCESS AREA INSPECTION SHEET

Date	Dificiencies Found	Corrective Action (if needed)	Initials of Inspector

CIRCLE, FROM BELOW, THE STORAGE AREA OR PROCESS AREA UNDERGOING INSPECTION FOR THIS INSPECTION SHEET.

1) MEK Tanks (No. 20 & 22)
2) Roto-Laminating Department - Production and Storage Areas
3) Press/Fusion Department - Production and Storage Areas
4) PCB Transformer Areas

INSTRUCTIONS FOR WEEKLY INSPECTIONS

Each of the departments listed below should designate a storage area inspector(s) responsible for carrying out these daily, weekly, and quarterly inspections.

This inspection sheet should be used for one calendar quarter's (13 weeks) worth of weekly inspections. Use one line per weekly inspection. Use one sheet for each inspection area. Fill in each comment area or write "N/A" for not applicable, where appropriate. Attach additional sheets only if necessary. Initial when each inspection has been completed.

CIRCLE, FROM BELOW, THE STORAGE AREA UNDERGOING INSPECTION FOR THIS INSPECTION SHEET AND COPY ONTO TOP OF OPPOSITE SIDE:

Press/ Fusion Department:

Courtyard Plasticizer tanks #14, #18, #12, #24, #2 & #26

MEK Ink Storage Pad

Roto-Laminating Department:

Outdoor Plasticizer Tanks #28 and #30

Boiler Room:

Petroleum Tanks #1, #3, #5 (UST) and #7 (UST)

Maintenance Department:

Hazardous Waste Accumulation Shed

CONDUCTING THE INSPECTION

Each inspection shall consist of a thorough investigation of the tank surface, valves, piping, flanges, and other connection devices for any evidence of free product. Inspect the secondary containment system for any deterioration. Check level gauge, and/or any other type of level or level alarm system for malfunctions. Report to department supervisor any deficiencies immediately. The Plant Manager must initial and date all deficiencies within 24 hours of when they are found and initiate proper corrective action. Attach a copy of the work order with supervisor's signature verifying the work has been completed.

After all 3 month's worth of inspections has been completed, follow directions on bottom of opposite page for the quarterly inspection of all other above ground valves pumps, flanges, connections, and locks in area, initial, and forward to Plant Maintenance Manager's Office.

"To the best of my knowledge, all inspections have been done properly and any corrective actions have been tended to immediately, under direction of the Plant Manager."

_____

Plant Maintenance Manager

WEEKLY/QUARTERLY STORAGE AREA INSPECTION SHEET

Storage area undergoing inspection: _____

Use this sheet for 3 months of weekly inspections of the specified storage area.

Date	No Deficiencies	Deficiencies found	Corrective Action Taken (if needed)	Initials of Inspector

*Instruct all the...

MATERIAL RELEASE REPORT

Fill out the following information in the event of any release of a hazardous substance while performing the following activities immediately: 1) stop the source of the release; 2) seek assistance and begin containing the released material; 3) take note of "special instructions" below and determine whether current release applies; 4) contact your supervisor and either Michele Burroughs (x3314) or Jim Hansen (x3286) of the event.

SPECIAL INSTRUCTIONS: If a release enters a sewer/storm drain, reaches an unpaved surface, or goes directly into the fire reservoir, Miry Run, or Hamilton Ditch, this information must be completed as soon as possible and must be delivered (directly or by telephone) to a supervisor or call ext. 3201 within 15 minutes.

NAME: _____ DATE: _____

SPECIFIC LOCATION OF RELEASE: _____

_____

COMMON NAME OF RELEASED CHEMICAL: _____

DID CHEMICAL ENTER SEWER/STORM DRAIN? _____

IF SO, GIVE BEST ESTIMATE OF AMOUNT THAT ENTERED: _____

TIME THAT THE RELEASE WAS DETECTED: _____

IF THE RELEASE BEGAN BEFORE IT WAS DETECTED, WHEN DO YOU BELIEVE IT BEGAN? _____

HAS THE RELEASE ENDED OR BEEN CONTAINED? _____

WHAT ACTIONS ARE BEING TAKEN TO CONTAIN THIS RELEASE? _____

_____

_____

This information is to be signed and sent to the Environmental Department.

_____ _____
Supervisor Date

_____
Department

DISCHARGE CLEANUP AND REMOVAL PLAN

(N.J.A.C. 7:1E-4.4)

CONGOLEUM CORPORATION
PLANT #1

Submitted To:
New Jersey Department of Environmental Protection and Energy
Bureau of Discharge Prevention

Revised: January 31, 1994

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APPENDICES

CONGOLEUM CORPORATION
Plant #1

DISCHARGE CLEANUP AND REMOVAL PLAN

The following is the Discharge Cleanup and Removal Plan for Congoleum Corporation's Plant #1, located at 861 Sloan Avenue, Hamilton Township, Mercer County. This Plan is written in accordance with the requirements set forth in **N.J.A.C. 7:1E-4.4.**

I. ACTION PLAN SUMMARY

Facility personnel, through the organization of an Emergency Preparedness Team, have developed an Action Plan known as the Emergency Procedures Manual to be utilized in the event of an emergency situation arising from such events as a discharge of a hazardous substance as defined in **N.J.A.C. 7:1E-1.6**, fire, explosion, natural disaster, or other event that has the potential of becoming an emergency or an environmentally endangering incident. This Plan combines much of the information that is already included in Congoleum's Plant #1 Contingency Plan (required by RCRA) and the Spill Prevention Control and Countermeasure (SPCC) Plan as well as additional information deemed necessary to be included by the Emergency Preparedness Team. The facility's subjectability to the Discharges of Petroleum and Other

Hazardous Substances regulations gave reason for a complete revision of the plant's emergency procedures. The up-dated Emergency Procedures Manual will be used in responding to, and minimizing health and environmental dangers from such events. The manual will be implemented by giving biannual drills in coordination with the local Fire Department to demonstrate its use and response capabilities.

The Emergency Procedures Manual itself resembles a quick reference guide and is primarily intended to be used by supervisors in the event of an emergency. As such, supervisors have been involved in the development of the Emergency Procedures Manual and trained in all aspects of it in the event of a situation in which it will be utilized.

The Response Coordinator and Alternate Response Coordinator have the responsibility of implementing the Emergency Procedures Manual during situations of abnormal operating conditions. The designated response coordinator is ultimately responsible to oversee any emergency or environmentally endangering situation but in certain situations must allow other personnel to direct. Please see the Chain of Command located in **Appendix AA.** For example, in situations involving fires, the Emergency Response Coordinator will have the senior officer of the plant Fire Brigade serve as the Incident Commander. The 2nd most senior officer of the Fire Brigade serves as back up or as alternate Incident Commander in the senior officer's absence (a thorough discussion on the Fire Brigade can be found in Section III). In cases involving a release of a hazardous substance, whether it be a leak or a discharge, and if the release does not constitute calling a Discharge Cleanup Organization, then it is the Maintenance Department supervisor's responsibility to

carry out a prompt and orderly cleanup of the release and then report back to the Response Coordinator. The Maintenance Department's Storeroom Manager and his crew have been fully trained for spill response. If additional aid is needed from plant personnel, individuals can be pulled from the Maintenance Department to aid in activities such as boom deployment, vacuum operation, etc. All of these employees are instructed on basic spill response techniques. The Emergency Response Coordinator maintains ultimate responsibility for determining the scope of a situation and whether the situation requires additional aid from an outside source.

If it is determined, by the response coordinator or his alternate, that a situation has developed or has the potential to develop beyond the ability that can be handled by facility personnel, the emergency response contractor will be notified to respond. The Emergency Response Contractor is **OHM Corporation**. Their emergency phone number can be found in **Section II**.

As instructed in the Emergency Procedures Manual, if during an emergency situation, a leak of a hazardous substance, as defined in **7:1E-1.6**, becomes a discharge, the New Jersey Department of Environmental Protection and Energy must be notified immediately by calling the following number:

(609) 292 - 7172

or

(609) 882 - 2000

Notification must be made within fifteen (15) minutes of the time that the person responsible for a discharge knew

of reasonably should have known, of the occurance of a discharge unless extenuating circumstances exist. In which case, the Department will determine whether there was just cause for the facility's delay of notification. Each notification must include the information regarding the discharge in accordance with **N.J.A.C. 7:1E-5.3:**

1) name, title, affiliation, address, and telephone number of the person reporting the discharge;
2) specific location of the discharge;
3) common name of the hazardous substance discharged;
4) best estimate of the quantity of each hazardous substance discharged;
5) date and time at which the discharge began, date and time at which the discharge was discovered, date and time at which the discharge ended - if it has ended;
6) actions taken to contain, clean up, and remove the hazardous substance discharged;
7) name and address of person responsible for the discharge.

Located in conspicuous places around the facility are Spill Reporting Procedures and a Spill Report Form. A copy of the procedures and Reporting Form can be found in **Appendix F.** The plant has developed these forms using guidance in **7:1E-5.3** to assure compliance with the requirements for reporting hazardous substance discharges. Department managers including the corporate Environmental Department have been instructed on the appropriate procedures to take during a discharge event. Also required to be reported immediately to the **NJDEPE** at the above number is any malfunction of leak detection or monitoring devices. Any notification to the **NJDEPE** must

be accompanied by a confirmation report with the information required by N.J.A.C. 7:1E-5.8. This confirmation report must be submitted within 30 days of the date the notification to the hotline was made.

As detailed in the Emergency Procedures Manual, the facility's evacuation procedure defines all aspects of performing an evacuation of the plant during an emergency event including establishment of secure meeting areas and supervisor responsibilities. It is presented in the manual in a clear and concise manner for easy reference and optimum efficiency during an emergency situation.

The Emergency Procedures Manual covers a variety of other abnormal situations such as procedures for handling liquid propane or natural gas leaks, loss of electric power, handling of CO_2 systems, Halon systems, and natural disasters such as floods or hurricanes.

Also included in the Emergency Procedures Manual are sections detailing the facility's coded alarm system, first aid for injured employees, equipment shutdown, police/ambulance/fire department calls, security, as well as a facility map.

II. EQUIPMENT/MATERIALS AVAILABLE FOR DISCHARGE OR EMERGENCY RESPONSE

The facility has made available a number of spill drums which are located throughout the facility in the event of a leak of a hazardous or non-hazardous substance. They are clearly marked and placed in areas where a leak of a

hazardous substance may be possible. A spill drum may contain any of the following materials and equipment for spill response:

- absorbent pads and booms,
- drain plug,
- PPE such as respirators, chemical resistant gloves, tyvex suit, goggles;
- "speedy dry",
- shovel, etc.

In addition to the equipment found in the spill drums, the plant keeps an inventory of other materials and equipment that can be used to cleanup a release. This list can be found in **Appendix BB.**

If a leak from a drum, tank, pipe, or other structure, requires additional equipment or has become a hazardous situation beyond the means of the trained plant personnel, a Discharge Cleanup Organization, registered with the Department pursuant to **7:1E-4.2**, has been retained by Congoleum to respond to such an incident. The contracted Discharge Cleanup Organization is:

OHM Corporation
200 Horizon Center Boulevard
Trenton, NJ 08650

OHM EMERGENCY RESPONSE SERVICES PHONE #: 800-537-9540

A copy of the contract between **OHM Corporation** and Congoleum for emergency response services is located at the facility.

III. PERSONNEL AVAILABLE TO RESPOND TO DISCHARGES OR OTHER ENVIRONMENTAL DANGERS

The Trenton Plant Fire Brigade, as mentioned in Section I, has the ability to respond to incipient fires and flammable chemical discharges. The brigade is comprised of key personnel that have been trained by the fire department in fire extinguishment techniques and procedures as well as flammable materials response. Members of the Brigade are assigned to various departments throughout the plant, although it is mandatory that when an alarm is activated, all Fire Brigade members respond to the location of the alarm. They then determine the cause of the alarm and take all appropriate actions necessary to secure the alarm location. At any fire scene/alarm location the senior Fire Brigade Officer will have complete control and responsibility of the location until either 1) the Township Fire Department arrives on site, or 2) the fire scene has been declared safe and secure by the senior Officer. Please refer to **Appendix CC** for a list of Fire Brigade members.

The Storeroom manager and his crew have been fully trained for spill response and are called upon when there is a small spill in the plant. If additional aid is needed from plant personnel, individuals can be pulled from the Maintenance department to aid in activities such as boom deployment, vacuum operation, etc. All employees are instructed on basic spill response techniques. A list of job titles of employees who qualify to aid in spill response can be found in **Appendix CC**

For discharges requiring the use of equipment and materials beyond the response capabilities of plant personnel, the Discharge Cleanup Organization shall be contacted to respond. The Department, as stated in **7:1E-4.4(a)3**, has available from the Discharge Cleanup Organization, **OHM Corporation**, a list of the trained personnel who are available to operate equipment used during emergency response as well as their qualifications.

IV. THE FACILITY'S RESPONSE COORDINATOR IS:

Jim Hansen - Plant Safety Manager
business phone: 584-3286
home phone: 215-750-0951

THE FACILITY'S ALTERNATE RESPONSE COORDINATOR IS:

Mike Sapienza - Plant Manager of Process Assurance
business phone: 584-3227
home phone: 215-321-0821

V. IDENTIFICATION OF PRIORITIES FOR OFF-SITE DEPLOYMENT

Should off-site deployment of equipment and personnel be necessary due to a situation causing a discharge to reach beyond plant property, the response coordinator or alternate would make a determination that the Discharge Cleanup Organization should respond if the situation is beyond the capabilities of plant personnel.

The facility property is bordered to the east by Interstate 295 with a wooded and undeveloped agricultural

lot beyond the interstate to the east. To the south is a large span of wooded land. Beyond the wooded area are two business establishments: General Felt Industries and Royal Distributors and Importers. West of the facility is a small wooded plot that leads to Klockner Road. On the other side of Klockner is Amtrak mainline with American Standard, manufacturers of plumbing fixtures, to the northwest of the facility, across the railroad tracks. To the north of the facility, across Sloan Avenue, are two small light industrial establishments: Federal Express and a small company that manufactures molded plastic products.

The closest residential area is found northeast of the facility, across the Interstate 295 interchange. The next closest residential areas are found south of the facility, across the street from General Felt or to the northwest of the facility across the Sloan Avenue overpass.

The main priority, should a discharge occur, would be the risk of the hazardous substance reaching either the sewers, Hamilton Ditch to the east of the facility, or Miry Run to the south of the facility. In the event that a hazardous substance were to enter the sanitary sewer system, as required in Congoleum's Permit to Discharge Non-Domestic Wastewater issued by Hamilton Township Department of Water Pollution Control, Congoleum shall notify the Township immediately upon knowledge of the upset in the discharge.

Should a discharge reach the storm sewers, which deposit into Hamilton Ditch and Miry Run, or if a discharge of a hazardous substance reaches directly into Hamilton Ditch or Miry Run or the reservoir, which is feed by and into Miry Run, the **NJDEPE**, in accordance with Congoleum's

NJPDES Permit No. 0004537 Section 14(F), will be notified by reporting the discharge to the number given above in Section I. Response to such a discharge would include immediately deploying absorbent booms and pads into the catch basins located at DSN001 (surface water discharge to Hamilton Ditch) or DSN002 (surface water discharge via a drainage swale to Miry Run), depending upon the location of the release. The flow from the catch basins may be temporarily halted to ease cleanup efforts and restrict product from being discharged into the water way. If there is evidence that the released substance has reached Hamilton Ditch or Miry Run, steps will be taken immediately to deploy boom and absorbent pads in these areas. Miry Run is accessible from parts of the property and also flows fairly slowly during most times of the year, making deployment of boom across the creek generally feasible. If necessary, the Discharge Cleanup Organization may be called upon to conduct a cleanup if it is determined that it is beyond the capabilities of plant personnel or if there is evidence that the environmentally sensitive areas identified in the ESA Plan are being jeopardized. If a discharge of a hazardous substances has reached such areas, a mitigation plan, with respect to the circumstances surrounding the discharge incident and the environmentally sensitive area affected, will be developed at that time.

VI. ENVIRONMENTALLY SENSITIVE AREAS PROTECTION PLAN

Please see **Appendix DD** for the Environmentally Sensitive Areas Protection Plan written pursuant to **7:1E-4.11**. The study area begins just north of the facility at the Upper

Assunpink Creek (See topographic map No. 1 of 9). The words "LIMIT OF STUDY" marks the upper limits of the study area. It then extends southwest to the mouth of the Assunpink into the Delaware River at Trenton. The study limits follow the Delaware River south to just below Hawk Island, north of the mouth of the Rancocas Creek where it is marked "LIMIT OF STUDY" (see topographic map No. 9 of 9). This equates to a 15-mile downstream area of study. These topographic maps required under **7:1E-4.3(b)6**, should be used for identification of the environmentally sensitive areas mentioned in the protection plan and can be found in **Appendix C.**

VII. PROCEDURES FOR DETERMINING RECYCLING OR DISPOSAL OPTIONS

In the event that a leak or a discharge of a hazardous substance would occur, the following are waste streams that would likely be generated given the substances located at the facility:

- dirt/water contaminated with petroleum,
- dirt/water contaminated with plasticizers,
- dirt/water contaminated with solvent, and
- dirt/water contaminated with miscellaneous debris.

Recycling and disposal options would be determined using Congoleum's knowledge of the contaminated material(s) and the extent of the contamination in the waste stream generated. Any disposal or recycling options would be made in full accordance with the New Jersey Solid and Hazardous Waste Management Regulations or the New Jersey Recycling Act, whichever applies, or any other appropriate guidance document issued by the U.S.

Environmental Protection Agency, New Jersey Department of Environmental Protection and Energy, and/or in coordination with the Mercer County Improvement Authority.

VIII. AGREEMENT WITH LOCAL EMERGENCY PLANNING COMMITTEE

Congoleum has been in contact with Walter Bronek, Chief of Emergency Response for the Hamilton Township Hazardous Materials Response Team, part of the Hamilton Township Office of Emergency Management. Chief Bronek has received a copy of this DPCC/DCR Plan, has reviewed the Plan thoroughly, and has acknowledged that in the event of a discharge at the Congoleum facility, located at 861 Sloan Avenue, Hamilton Township, the Hamilton Township Hazardous Materials Response Team, when contacted by Congoleum, will provide necessary emergency response services. Please See **Appendix FF** for a copy of the letter received from the Hamilton Township Hazardous Materials Response Team which serves as written agreement with the Local Emergency Planning Committee as required under **7:1E-4.4(a)8.**

Congoleum works closely with Kevin Oswald of the local Fire Department and the plant is assisted by the Department during their biannual fire drills. Police Department officials are also familiar with the facility and would respond if an event triggered the need for police activity.

IX. FINANCIAL RESPONSIBILITY DOCUMENTS

Please refer to **Appendix EE** for a copy of financial responsibility documents required pursuant to **7:1E-4.5** and **Appendix B.3(2).**

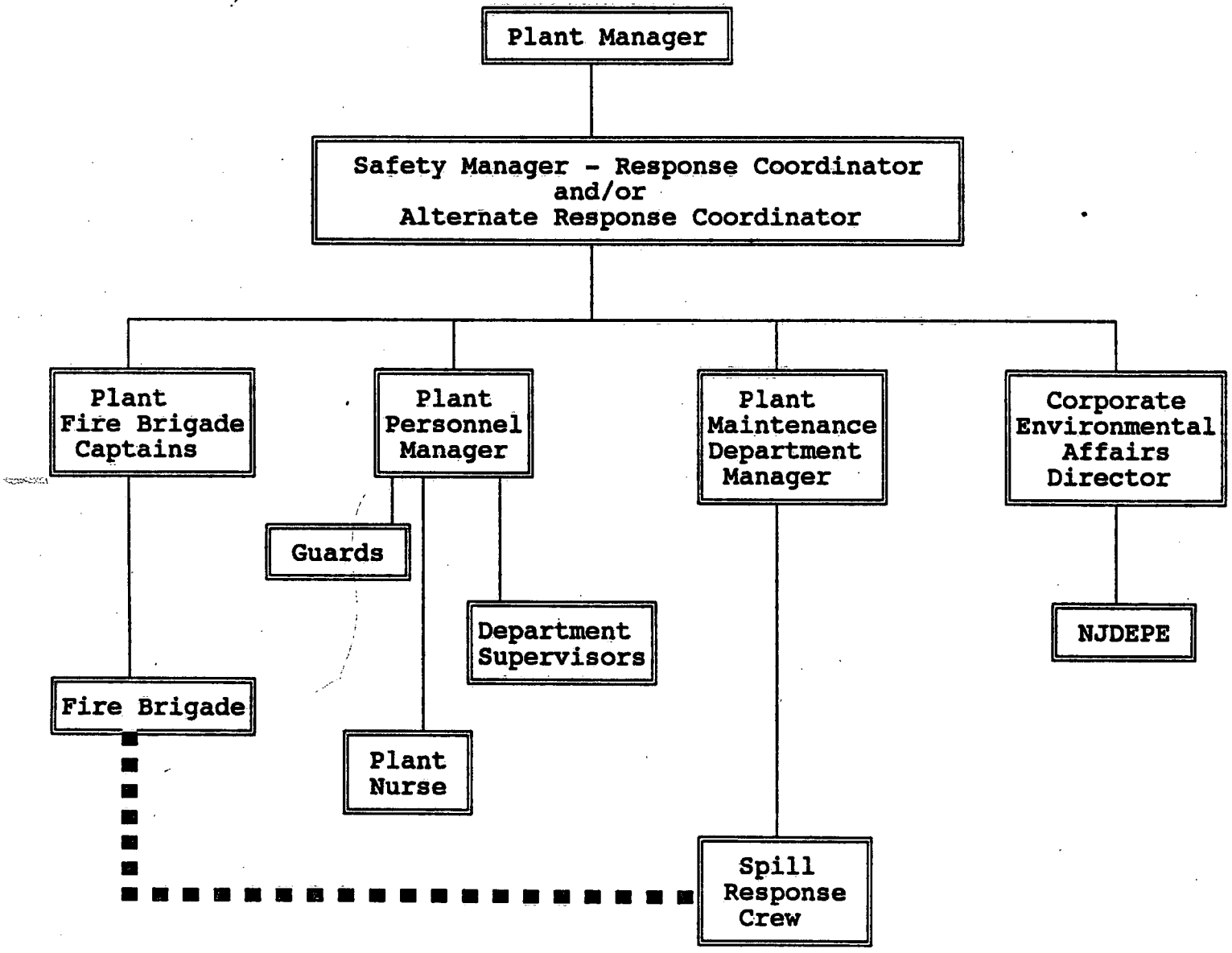
DCR - APPENDIX AA

CONGOLEUM CORPORATION

PLANT #1

CHAIN OF COMMAND

CHAIN OF COMMAND



DCR - APPENDIX BB

CONGOLEUM CORPORATION

PLANT #1

DISCHARGE CLEANUP EQUIPMENT LIST

LIST OF EQUIPMENT TYPICALLY AVAILABLE TO PLANT PERSONNEL FOR RESPONDING TO DISCHARGES AND OTHER EMERGENCIES

-- Between 5-10 full bales of sorbent pads

-- Between 5-10 full bales of sorbent booms

-- Minumum of 50- 55 gallon open top metal drums

-- Minimum of 2 skids (100- 50 lb. bags) of high-dry

-- 5 wet/dry vacs including one heavy-duty unit that mounts on top of a 55 gallon drum

-- 300 hand held fire extinguishers (primarily ABC chemical with some CO_2 and several Halon units where appropriate)

-- 60 fire hoses inside of the plant

-- 10 hose house stations around the plant equipped with 300 feet of line

-- Shovels

-- PPE: tyvex suits, respirators, splash googles and full face shields, chemical resistant gloves, chemical resistant boots, etc.

DCR - APPENDIX CC

CONGOLEUM CORPORATION

PLANT #1

FIRE BRIGADE MEMBERS AND QUALIFIED DISCHARGE CLEANUP PERSONNEL

PLANT #1 FIRE BRIGADE MEMBERS

Trained Fire fighters	Training
Fred Hendrickson - Captain	Fire fighter training given by Mercerville Fire Co.*
Rick Kupst - Captain	same*
Lambert Wallrath - Lieutenant	same*

*In addition to the training mentioned above, each of these individuals are professional volunteer fire fighters for their communities and have received training from those organizations as well.

Technical Advisors/Consultants	
Tom Maggs	same
John Grachala	same

Administrative/Response Coordinators	
Jim Hansen	Fire fighter training given by Mercerville Fire Co.
Mike Sapienza	same

QUALIFIED DISCHARGE CLEANUP PERSONNEL

	Training
Carmen Santitoro - Manager	basic spill response
James Cipollonni	basic spill response
Ray Stoutenger	basic spill response

In additon to the discharge cleanup personnel listed above, who normally respond to spills within the facility, the plant has approximately 25 millwrights and other maintenance department employees who are able to deploy and collect sorbents, operate pumps, isolate and shut off pipes and hoses, and perform other support operation during a spill response.

DCR - APPENDIX DD

CONGOLEUM CORPORATION

PLANT #1

ENVIRONMENTALLY SENSITIVE AREAS PROTECTION PLAN

CONGOLEUM CORPORATION
PLANT #1

ENVIRONMENTALLY SENSITIVE AREAS PROTECTION PLAN

As indicated on the Topographical Map with the Environmental Sensitive Areas Maps and discussed in this section, no Environmentally Sensitive Areas (**ESAs**) are located on the site itself.

The following Environmentally Sensitive Areas Protection Plan (**ESAPP**) has been prepared pursuant to **N.J.A.C. 7:1E-4.11**, and is certified by Joseph K. Shisler, Ph.D. of Shisler Environmental Consultants, Inc. (**SEC**). The **ESAPP:**

1. Identifies environmentally sensitive areas (**ESAs**) that could be affected by a discharge from the facility;

2. Identifies the seasonal sensitivity of these areas;

3. Provides for an environmental assessment of the impact of any discharge into the identified area; and

4. Provides for the protection from, and mitigation of, any potentially adverse impact on the identified areas in the event of a discharge.

ENVIRONMENTALLY SENSITIVE AREAS

The Environmentally Sensitive Areas (**ESAs**) were identified and mapped within the study areas down-gradient from the facility (see maps). The facility is located in a suburban upland area with no adjacent water sources. A number of sources have been used in **ESA** identification as noted on the **ESA** maps (see attached maps) and a field inspection of the area was made.

SURFACE WATERS [N.J.A.C.7:1E-1.8(a)1]

All surface waters as listed under **N.J.A.C. 7:1E-1.8(a)1** are listed on the Environmentally Sensitive Areas Maps. These areas were delineated through the use of the following sources: **USGS** 7.5 Minute Series Topographic Quadrangle Maps, **USFWS** National Wetlands Inventory Wetlands Maps, New Jersey Freshwater Wetlands Maps, and Soil Conservation Service County Soils Surveys.

The surface waters that Miry Run discharge into are identified by the New Jersey Department of Environmental Protection & Energy for

Surface Water Quality standards (N.J.A.C. 7:9-4.1 et seq.) and is classified as FW2-TM whose designated uses are the following (N.J.A.C. 7:9-4.12(f)):

1. Secondary contact recreation;
2. Maintenance and migration of fish populations;
3. Migration of diadromous fish;
4. Maintenance of Wildlife;
5. Any other reasonable uses.

Surface Water Within The Study Area

Surface Water	Classification
Assunpink Creek	
Whitehead Mill Pond to Delaware River	FW2-NT
Delaware River	
Head of tide at the Trenton-Morrisville Bridge, Trenton, River Mile 133.4 to below mouth of Pennypack Creek, Pennsylvania at River Mile 108.4	Zone 2

SOURCES OF WATER SUPPLY [N.J.A.C. 7:1E-1.8(a)2]

As defined in the N.J.A.C. 7:1E-1.8(a)2, water sources were identified down gradient from the site (15 Mile Limit).

Burlington City Water Department	Delaware River

BAY ISLANDS AND BARRIER ISLAND CORRIDORS [N.J.A.C. 7:1E-1.8(a)3]

No bay island as listed under N.J.A.C. 7:1E-1.8(a)3 were identified within the delineation limit of the tertiary watershed (Ref: Personal communication with Dr. Halsey).

BEACHES [N.J.A.C. 7:1E-1.8(a)4]

No beaches were delineated associated with the area as mapped (see maps). This was determined from the USGS topographic maps, Soil Conservation Service Mercer and Burlington County Soil Surveys and aerial photographs.

DUNES [N.J.A.C. 7:1E-1.8(a)5]

There were no dunes identified within the tertiary watershed as determined from the Soil Conservation Service Soil Map for Mercer and Burlington Counties.

WETLANDS AND WETLAND TRANSITION AREAS [N.J.A.C. 7:1E-1.8(a)6]

Wetlands associated with Miry and Assunpink Creeks and the Delaware River tidal wetland systems were mapped on the Environmentally Sensitive Area Maps. The sources of the delineation of the sensitive areas was from various sources (see maps for references). The transition areas associated with the wetland system were not mapped but would include areas determined to be of intermediate width (50 feet) to exceptional resource width (150 feet) according to the New Jersey Freshwater Wetland Protection Act N.J.S.A. 13:9B-1 et seq.) From field inspection and view of maps indicate that much of the Miry and Assunpink Creek drainage basins have been altered through construction and development which have altered the natural transition zone associated with the creeks and tidal marsh.

BREEDING AREAS [N.J.A.C. 7:1E-1.8(a)7]

The breeding areas as defined in N.J.A.C. 7:1E-1.8(a)7 would include all of the wetland areas mapped as wetland and wetland transition areas (N.J.A.C. 7:1E-1.8(a)6) on the Coastal Environmental Services, Inc. maps. These wetland areas are seasonally sensitive during the spring. Areas were delineated from the USFWS National Wetlands maps and the New Jersey Freshwater Wetlands Maps.

MIGRATORY STOPOVER AREAS [N.J.A.C. 7:1E-1.8(a)8]

The migratory stopover areas as defined in N.J.A.C. 7:1E-1.8(a)8 would be the major wetlands systems that would be seasonally sensitive in the spring and fall months when large populations of migrants use these area during their migration. These areas are indicated on the maps.

WINTERING AREAS [N.J.A.C. 7:1E-1.8(a)9]

Wintering areas in the Delaware River Bay and its tributaries as defined in wintering areas N.J.a.C. 7:1E-1.8(a)9, could be impacted by a spill. They are seasonally sensitive to discharges since their use is during the winter months. These areas were delineated from the USFWS National Wetlands Maps, the New Jersey Freshwater Wetlands Maps and Coastal Environmental Services, Inc. maps.

PRIME FISHING AREAS [N.J.A.C. 7:1E-1.8(a)10]

The Delaware River is a prime fishing area as defined in **N.J.A.C. 7:7E-1.8(a)10.** This was determined from personal experience and review/of literature associated with the fishing in New Jersey.

FINFISH PATHWAYS [N.J.A.C. 7:1E-1.8(a)11]

According to the Technical Manual for Stream Encroachment, the following systems were identified as confirmed (C) or reported (R) runs of anadromous fishes. The only species identified as still using the drainage systems was herring (Alewife, Alosa pseudoharengus, and Blueback Herring (A. aestivalis), the American shad (A. sapidissima). The American eel (Anguilla rostrata), is found throughout the Delaware River drainage basin.

ESTUARINE AREAS SUPPORTING SUBMERGED VEGETATION [N.J.A.C.7:1E-1.8(a)12]

None of the areas downstream are estuarine areas supporting submerged vegetation, as defined in **N.J.A.C. 7:1E-1.8(a)12.** No documented submerged vegetation *Ruppia maritima* (Widgeon Grass) and *Zostera marina (Eelgrass)* within the limits of a potential spill, 15 miles downstream (see maps).

SHELLFISH HARVESTING WATERS [N.J.A.C. 7:1E-1.8(a)13]

No areas as defined in the Shellfish Growing Water Classification Charts and would meet the definition of **N.J.A.C. 7:1E-1/8(a)13,** would be affected by a spill.

FOREST AREAS [N.J.A.C. 7:1E-1.8(a)14]

As defined in **N.J.A.C. 7:1E-1.8(a)14,** there are no forested areas that would be impacted by a potential spill within the area of concern.

HABITAT FOR FEDERAL AND STATE ENDANGERED OR TRREATENED PLANT AND ANIMAL SPECIES [N.J.A.C. 7:1E-1.8(a)15]

The wetland and transition areas associated with Miry and Assunpink Creeks contain a resident and migrant endangered and threaten species as defined in **N.J.A.C. 7:1E-1.8(a)15.** From personal experience, the habitat associated with the Miry Creek area would not be critical for the survival of any Federal and State endangered or threatened species. The major areas associated with the Delaware River and upstream in the Assunpink Creek Watershed

are identified and are managed for the protection of the species. Exact locations of individual species are usually not provided by the New Jersey Heritage Program.

There have been reports of the *Falco peregrinus* (Peregrine Falcon) moving through the area and recently nesting in the Trenton area.

FEDERAL AND STATE WILDERNESS AREAS [N.J.A.C. 7:1E-1.8(a)16]

There are no areas listed as designated components of the Natural Areas System according to N.J.A.C. 7:2-11.12 within the Miry Creek and Delaware River area.

AREAS DESIGNATED AS WILD, SCENIC, RECREATIONAL, OR DEVELOPED RECREATIONAL RIVERS [N.J.S.C. 7:1E-1.8(a)17]

As defined in N.J.A.C. 7:1E-1.8(a)17, wild, scenic, recreational, or developed recreational rivers, pursuant to the National Wild and Scenic Rivers Act, 16 U.S.C. 1271 et seq. of the New Jersey Wild and Scenic Rivers Act, N.J.S.A. 13:8-45 et seq. and N.J.A.C. 7:38, were not identified within the area of this study.

ENVIRONMENTALLY SENSITIVE AREAS WITH SEASONAL SENSITIVITY

A number of areas were further identified in earlier sections having seasonal sensitivity to a potential discharge from the facility would be the tidal wetlands associated with Miry Creek, Assunpink Creek and the Delaware River.

WETLANDS

Wetlands are major areas for concern throughout the year for different reasons. The following is a summary of the reasons for the protection.

Spring

- Wetland areas are major migratory stopover locations in the spring for species going north to nest. A number of mammal and avian populations use the various wetland systems for nesting. At that time of year the vegetation is just starting to grow and is very sensitive to a discharge of material.

Summer

- Wetlands are used by a number of avian resident species for the raising of their young. The areas are also important for the production of large biomass in the forms of fish, insects,

and organic material that will periodically be exported during rains and high tides.

Fall

- During the fall months, wetland systems become the stopover location for a number of species on their southern migration.

Winter

- Winter season is the time a number of the northern species use the tidal wetlands as their seasonal stopover location. Their use of the wetlands is limited to the environmental conditions.

ENVIRONMENTAL ASSESSMENT

In the event of a discharge from the facility, an environmental assessment will be performed by a qualified environmental consultant contracted by the facility. The environmental assessment will identify impacted areas and set up sampling program of both the impacted area(s) and control areas to determine impacts.

PROTECTION FROM AND MITIGATION OF POTENTIALLY ADVERSE IMPACTS TO ENVIRONMENTALLY SENSITIVE AREAS

The primary protection from adverse impacts to identified environmentally sensitive areas as the result of a discharge shall begin on site with the implementation of the "Contingency and Emergency Response Plan." The goal of the plan is to contain all discharges on site and away from Environmentally Sensitive Areas. The only way a spill could reach the **ESA** is through the stormwater drainage system.

REFERENCES

Sue Halsey, Ph.D. personal communication June 29, 1992, NJDEPE, Trenton, NJ.

New Jersey Freshwater Wetlands Maps. 1986. Land Use Regulation Element NJDEPE, Trenton, NJ.

New Jersey Natural Lands Trust. 1991. Directory of Landholdings. Trenton, NJ.

Powley, V.R. 1987. Soil survey for Middlesex County, New Jersey.

U.S.D.A. Soil Conservation Service. 218 pp. + maps.

Shellfish Water Classifications. Bureau of Shellfish Control. NJDEPE, Trenton, NJ.

Technical Manual for Stream Encroachment. Office of Regulatory Policy, NJDEPE, Trenton, NJ.

Tidal Wetlands Maps. Environmental Regulation, Tidelands Management Program, NJDEPE, Trenton, NJ.

U.S. Environmental Protection Agency. 1989. Priority Wetlands List for the State of New Jersey. U.S.E.P.A. Region 2, NY, NY.

U.S. Fish and Wildlife Service, 1981. National Wetlands Inventory Maps. Newton Corners, MA.

Wild and Scenic Rivers. Division of Parks and Forestry, Office of Natural Lands Management, NJDEPE, Trenton, NJ.

SHISLER
ENVIRONMENTAL
CONSULTANTS, INC.

MARINE SCIENTIST CERTIFICATIONS

I hereby certify that the Environmentally Sensitive Areas Protection Plan, within this DPCC/DCR Plan identified those environmentally sensitive areas that could be affected by a discharge from:

CONGOLEUM CORPORATION
861 Slack Avenue
Trenton, NJ 08619

facility and the seasonal sensitivity of those areas, provides for protection from, and mitigation of, any potentially adverse impact on the identified areas, and for any environmental assessment in the event of a discharge.

For SHISLER ENVIRONMENTAL CONSULTANTS, INC.

Joseph K. Shisler, Ph.D.
President

7/15/93

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JOSEPH K. SHISLER, Ph.D.

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Consultation: (908) 446-3669

EDUCATION:

1975 Ph.D. Zoology, Rutgers University, N.J.
1970 M.A. Environmental Education, Glassboro State College, N.J.
1965 B.S. Biology, Lenoir-Rhyne College, N.C.

President of Shisler Environmental Consultants, Inc., Hightstown, NJ. Formally at Rutge University for over 15 years where he directed research on the management of wetlands, stormwat management and wetland mitigation. Dr. Shisler has been a consultant to the various state, federal a international agencies concerning wetlands and stormwater management issues and has published ov 125 papers on the subject. Dr. Shisler's work was recognized by the New Jersey Wildlife Society w presented him with the 1980 Conservationist of the Year. Dr. Shisler has completed an evaluation the wetlands on Staten Island for the New York Department of Environmental Conservation. Govern Kean appointed him chairperson of the newly formed New Jersey Wetlands Mitigation Council in 19

Invited participant in workshops concerned with Wetland Management, Mosquito Contr Dredge Disposal, Wildlife Management, Coastal Zone, Flood Plain Management and Stormwa Management.

PROFESSIONAL BACKGROUND:

1991-Present
President of Shisler Environmental Consultants, Inc.
23 Running Brook Drive, Hightstown, New Jersey 08520

1983-1991
Vice-President and Partner of Environmental Connection, Inc.
6 Throckmorton Street, Freehold, New Jersey 07728

1975-1988
Associate Research Professor
Mosquito Research and Control, Rutgers University, New Brunswick, N.J. 08903

PUBLICATIONS:

Published over 100 scientific papers in various periodicals.

PRESENTATIONS:

Presented over 150 scientific papers at various state national and international meetings.

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CONSULTANCY WITH STATE AND FEDERAL AGENCIES:

U.S. Dept. of State - Agency for International Development
Overseas consultant to the US-AID antimalarial project in Zaire.
Invited participant and chairperson of the Water and Weed Management and Sour
Reduction Section for the Workshop "Comprehensive Vector Control - Curre
Status and Research Needs".

U.S. Dept. of Interior - Park Service
Evaluated the development of a comprehensive mosquito control program for Cape C
National Park.

U.S. Environmental Protection
Wetlands mitigation in the northeastern United States.
Problem species associated with wetland mitigation.
Planning for 1990 Wetland Research.

International Irrigation Management Institute Kandy, Sri Lanka, Environmental Mana
ment for vector control.

N.J. Dept. of Health
Mammal trapping and habitat identification consultant for possible vectors of Ly
disease.

ADJUNCT FACULTY:

University of South Carolina, College of Health,
The International Center of Public Health Research

AFFILIATIONS:

Association of State Wetland Managers
Atlantic Estuarine Research Society
The Coastal Society
Ecological Society of America
Estuarine Research Federation
National Association of Environmental Professionals
New Jersey Academy of Science
New Jersey Wildlife Society
Society of Ecological Restoration
Society of Wetland Scientists
The Wildlife Society

ADVISORY BOARDS:

American Wetland Research Foundation, Inc. (1985-present)
New Jersey Builders Association Environmental Committee (1991-present)
New Jersey Stormwater Technical Working Group (1979-1981)
New Jersey Stormwater Management Technical Committee (1991-present)
New Jersey Wetlands Mitigation Council (1988-present Chairperson)

CERTIFICATIONS:

USEPA-Accredited Asbestos Building Inspector
USEPA-Accredited Asbestos Management Planner

PERMITS:

U.S. Fish and Wildlife Service Master Bird Banding Permit (1975-1985)

EXPERT WITNESS

Dr. Shisler has been qualified as an expert witness in various environmental fields includi wetland delineations and management, wildlife management, ecology, stormwater management issue environmental impact assessments, and pest management by various Municipal and County Planni Boards and Environmental Commissions including the following:

Aberdeen Township
Atlantic Highlands
Bernards Township
East Windsor Township
Franklin Township
Freehold Township
Galloway Township
Helmetta
Hightstown
Holmdel Township
Howell Township
Manalapan Township
Marlboro Township
Middletown Township
Millstone Township
Monroe Township
Morris County
Old Bridge Township
Spotswood
Tinton Falls Township
Washington Township
Upper Freehold Township
South River

TEACHING

Dr. Shisler has served as a faculty member of Rutgers University and as an adjunct faculty member the University of South Carolina and Trenton State College.
Dr. Shisler has participated in a number of short courses for professionals including:

Office of Continuing Professional Education, Cook College, Rutgers University, New Brunswick Jersey

Stormwater Management for Engineers: 1984-1989
Sediment and Erosion Control: Planning, Design, and Application: 1986, 1987
Identification of New Jersey Wetlands: 1987, 1988
Coastal Zone Management*: 1987
Stream Encroachment*: 1989
Wetlands of the Northeast*: 1989, 1990
Wetland Law and Regulations: 1992
Wetlands Mitigation*: 1990, 1991
Wetlands Ecology: 1990, 1991
* Faculty Coordinator

The National Wetland Science Training Cooperative, L.C. Lee & Associates, Inc., Seattle, Wash

Jurisdictional Delineation of Wetlands in the Mid-Atlantic States
1988 & 1989: New Brunswick, New Jersey
1990: Annapolis, Maryland
Constructed Wetlands for Stormwater Management:
1991: Seattle, Washington

Executive Enterprises, Inc., New York, New York

Wetlands Regulations and Delineation, Washington, DC 1991
Wetlands: Delineation, Mitigation, and Permitting Procedures, Washington, DC 1992

PUBLICATIONS:

Shisler, J.K. 1973. Pioneer plants on spoil piles associated with mosquito ditching. Proc. N.J. Mosq. Exterm. Assoc. 60:135-141.

Shisler, J.K. and D.M. Jobbins. 1975. Aspects of biological productivity in mosquito ditched salt marshes. Proc. N.J. Mosq. Exterm. Assoc 62:48-49.

Shisler, J.K., F.H. Lesser and T.L. Schulze. 1975. Reevaluation of some effects of water management on the Missipillion Marsh, Ke County, Delaware. Proc. N.J. Mosq. Exterm. Assoc. 62:276-278.

Shisler, J.K. 1975. Movement of organic carbon in natural and mosquito ditched salt marshes. Ph.D. Thesis, Rutgers Univ. 124 p.

Hansen, J.A., F.H. Lesser, R.W. Lombardi, J.K. Shisler and P. Slavin, 1976. The economics of open marsh water management- A Ne Jersey View. Proc. N.J. Mosq. Exterm. Assoc. 63:77-81.

Shisler, J.K. and T.L. Schulze. 1976. Some aspects of open marsh water management procedures on clapper rail production. Proc. N.E. Fi and Wildlife Conf. 33:101-104.

Burger, J., J.K. Shisler and F.H. Lesser. 1977. Effects of water on nesting avian species in mosquito control marshes. Proc. N.J. Mos Control Assoc. 64:184-195.

Lesser, F.H., W.J. Crans and J.K. Shisler. 1977. Methods to document mosquito breeding on tidal marshes by artificial means. Proc. N. Mosq. Control Assoc. 64:162-164.

O'Carroll, G.H. and J.K. Shisler. 1977. Evaluating the multiple impacts of stream renovation for mosquito control. Proc. N.J. Mosq. Contr Assoc. 64:176-182.

Shisler, J.K. 1977. Mosquito breeding associated with dredge spoil deposition areas in New Jersey. Proc. N.J. Mosq. Control Assoc. 64:19 208.

Shisler, J.K. and D.M. Jobbins. 1977. Salt marsh productivity as affected by the selective ditching technique. Open Marsh Water Manag ment. Mosquito News 37:631-636

Shisler, J.K. and D.M. Jobbins. 1977. Tidal variations in the movement of organic carbon in salt marshes in New Jersey. Marine Biolo 40:127-134.

Burger, J. and J.K. Shisler. 1978. The effects of ditching a salt marsh on colony and nest site selection by Herring Gulls, *Larus argentatus*. Am. Midl. Nat. 100:54-63.

Burger, J. and J.K. Shisler. 1978. Nest site selection of Willet in New Jersey salt marshes. Wilson's Bulletin 90:599-607.

Burger, J. and J.K. Shisler. 1978. Nest site selection and competitive interactions of Herring Gulls *Larus argentatus* and Laughing Gulls *atricilla* in New Jersey. Auk 95:252- 266.

Burger, J., J.K. Shisler and F. Lesser. 1978. The effects of ditching salt marshes on nesting birds. Proc. Colonial Waterbird Group 1978: 37.

Burger, J., J.K. Shisler and F.H. Lesser. 1978. Clam Island: An experiment in habitat manipulation in a Herring Gull colony. Proc. N Mosq. Control Assoc. 65:123-134.

Shisler, J.K. 1978. Water management methods being utilized in coastal marshes to control mosquito populations in New Jersey. Proc. Mosq. Control Assoc. 65:59-66.

Shisler, J.K. 1978. The efficiency of water management in the coastal areas of New Jersey. Proc. N.J. Mosq. Control Assoc. 65:196-198.

Slavin, P.T., J.K. Shisler and F. Ferrigno. 1978. Current status of tidal restoration of salt hay impoundments for mosquito control. Proc. Mosq. Control Assoc. 65:214-216.

Shisler, J.K., T.L. Schulze and B.L. Howes. 1978. The effect of *Iva frutescens* on the standing crop biomass of *Spartina patens*. Biologica Conservation 14:159-166.

Shisler, J.K., F.H. Lesser, B. Gooley, J. Hansen and P. Slavin. 1978. Practical application of the rotary ditcher in pond construction. M quito News 38:112-115.

Able, K.W., J.K. Shisler and C.W. Talbot. 1979. Preliminary survey of fishes utilizing New Jersey marshes altered for control of salt ma mosquitoes. Proc. N.J. Mosq. Control Assoc. 66:103-115.

Burger, J. and J.K. Shisler. 1979. The immediate effects of ditching a salt marsh on nesting herring gulls *Larus argentatus*. Biological Co servation 15:85-103.

Shisler, J.K. 1979. A survey of mosquito control equipment in New Jersey. Proc. N.J. Mosq. Control Assoc. 66:29-33.

Shisler, J.K. 1979. The effect of water management in coastal productivity in New Jersey. Proc. of Florida Anti-Mosq. Assoc. 50:37-40.

Shisler, J.K. and F. Lesser. 1979. Early succession in a low level salt marsh impoundment. Proc. of Florida Anti-Mosq. Assoc. 50:41-43.

Shisler, J.K., F. Lesser and T. Candeletti. 1979. An approach to the evaluation of temporary versus permanent measures in salt marsh m quito control operations. Mosquito News 39:776-780.

Talbot, C.W., K.W. Able and J.K. Shisler. 1979. Salt marsh fishes of New Jersey. A preliminary survey. Bull. N.J. Acad. Sci. 24:99.

Schulze, T.L., J.K. Shisler and A. Iaci. 1979. Cholinesterase inhibition in New Jersey mosquito control personnel. Proc. N.E. Mosq. Co Assoc. 25:40-44.

Burger, J. and J.K. Shisler. 1980. The process of colony formation among Herring Gulls *Larus argentatus* nesting in New Jersey. Ib 122:15-26.

Chanda, D.A. and J.K. Shisler. 1980. Mosquito control problems associated with storm water control facilities. Proc. N.J. Mosq. Contr Assoc. 67:193-200.

Talbot, C.W., K.W. Able, J.K. Shisler and D. Coorey. 1980. Seasonal variation in composition of fresh and brackish water fishes of Ne Jersey mosquito control impoundments. Proc. N.J. Mosq. Control Assoc. 67:50-63.

Burger, J. and J.K. Shisler. 1980. Colony and nest site selection in Laughing Gulls in response to tidal flooding. Condor 82:251-258.

Brooks, G.D. and J.K. Shisler. 1980. The feasibility of and recommendations for anti-larval measures against vector Anophelines in Zair American Public Health Assoc. Washington, D. C. 28 pp.

Shisler, J.K. and G.D. Brooks. 1981. The application of water management methods for controlling vector mosquito populations in Tropic Africa. Proc. N.J. Mosq. Control Assoc. 68:32-36.

Smith, C.M. and J.K. Shisler. 1981. An assessment of storm water facilities as sources of mosquito breeding. Mosquito News 41:226-230.

Shisler, J.K. and W. Harker. 1981. Source reduction as an economical approach to mosquito management. Mosquito News 41:419-423.

Shisler, J.K. and T.L. Schulze. 1981. Comparison of costs for mosquito control on New Jersey disposal sites. Mosquito News 41:465-469.

Slavin, P. and J.K. Shisler. 1981. Open Marsh Water Management - A ten year perspective. Proc. N.E. Mosq. Control Assoc. 27:32-35.

Burger, J. and J. Shisler. 1981. Effects of physical alterations on nesting bird populations in salt marshes of New Jersey. Estuaries 4:265-26

Coorey, D.N., K.W. Able and J.K. Shisler. 1981. Salt Marsh Fishes of New Jersey: Life history of the Tidewater Silverside, *Menidia ber lina*. Bull. N.J. Acad. of Sci. 26:66.

Burger, J., J. Shisler and F. Lasser. 1982. Avian utilization on six salt marshes in New Jersey. Biological Conservation 23:187-212.

Shisler, J.K., F. Ferrigno, R. Hall and J. Hansen. 1982. The value of tidal restoration of salt hay farms. Proc. N.E. Fish and Wildlife Co 1982:22.

Talbot, C.W., K.W. Able and J.K. Shisler. 1982. Alteration of New Jersey salt marshes for mosquito control - Effects on fish species comp sition. Proc. N.E. Fish and Wildlife Conf. 1982:37.

Brady, S. and J.K. Shisler. 1982. The effects of stream alterations on shrub swamp avifauna: I. Pre-alteration sampling. Proc. N.J. Mo Cont. Assoc. 69:107-114.

Shisler, J.K. 1982. Is water management feasible in Texas salt marshes and barrier islands? Proc. Texas Mosq. Cont. Assoc. 26:1-11.

Able, K.W., C.W. Talbot and J.K. Shisler. 1983. The Spotfin Killifish, *Fundulus luciae* is common in New Jersey salt marshes. Bull. N Acad. of Sci. 28:7-11.

Burger, J. and J.K. Shisler. 1983. Succession and productivity on perturbed and natural *Spartina* salt marsh areas in New Jersey. Estuar 6:50-56.

Slavin, P. and J.K. Shisler. 1983. Avian utilization of a tidally restored salt hay farm. Biological Conservation 25:271-285.

Reinert, W. and J.K. Shisler. 1983. Problems associated with the Mullica River Impoundment Project. Proc. N.J. Mosq. Control Assc 70:36-41.

Shisler, J.K. and D. Charette. 1983. Mosquito problems associated stormwater facility development in New Jersey. Proc. N.J. Mosq. Cont Assoc. 70:29.

Shisler, J.K. and D. Charette 1983. Physical factors of stormwater management facilities effecting colonization by mosquito populations. B N.J. Acad. of Sci. 28:27.

Shisler, J.K., F. Ferrigno, R. Hall and J. Hansen. 1983. Tidal restoration of salt hay farms. Bull. N.J. Acad. of Sci. 28:17.

Slavin, P. and J.K. Shisler. 1983. Habitat separation of three Aedine species (Diptera: Culicidae) in a salt marsh-upland transition zone. B N.J. Acad. of Sci. 28:13.

Shisler, J.K. 1983 Irrigation projects and mosquito vectors. *In*: Workshop on Irrigation and Human Welfare: Integrated Management Water Resources in LDCs. Cook College-Working Group on Water and Human Welfare, International Agricultural and Fc Program Office, Miscellaneous Publications, Rutgers University, New Brunswick, NJ.

Schulze, T.L., G.S. Bowen, M.F. Lakat, W.E. Parkin and J.K. Shisler. 1984. *Ixodes dammini* (Acari:Ixodidae) and other ixodid ticks c lected from white-tailed deer in New Jersey, USA. I. Geographical distribution and its relation to selected environmental physical factors. J. Med. Ent. 21:741-749.

Shisler, J.K. and D. Charette. 1984. Mitigated marshes and the creation of potential mosquito habitats. Proc. N.J. Mosq. Control Ass 71:78-87.

Wearne, H.M. and J.K. Shisler. 1984. Preliminary salinity preference tests for the oviposition of *Aedes solllicitans* (Walker). Proc. N Mosq. Control Assoc. 71:115-119.

Shisler, J.K. and D. Charette. 1984. Factors effecting the of marshes in coastal ecosystems. Bull. N.J. Acad. of Sci. 29:32.

Schulze, T.L., G.S. Bowen, M.F. Lakat, W.E. Parkin and J.K. Shisler. 1984. Geographical distribution and density of *Ixodes damn* (Acari: Ixodidae) and relationship to Lyme disease transmission in New Jersey. Yale J. Biol. and Medicine 57:667-675.

Schulze, T.L., G.S. Bowen, M.F. Lakat, W.E. Parkin, R. Altman, E.M. Bosler, B.G. Ormiston and J.K. Shisler. 1984. *Amblyomma am canum* - a potential vector of Lyme disease in New Jersey. Science 224:601-603.

Coorey, D.N., F.W. Able and J.K. Shisler. 1984. Life history and food habits of the inland silversides, *Menidia beryllina*, in a New Jer salt marsh. Bull. N.J. Acad. of Sci. 30:29-37.

Shisler, J.K. and D.J. Charette. 1984. Artificial versus tidal salt marshes: Are they equivalent for mitigation? Gambling with the Sho Proceedings of the Coastal Society 9:159- 165.

Charette, D.J. and J.K. Shisler. 1984. Comparison of the plant community in managed and natural coastal foredunes along Atlantic coast New Jersey. Gambling with the Shore: Proceedings of the Coastal Society 9:19-28.

Schulze, T.L., G.S. Bowen, M.F. Lakat, W.E. Parkin and J.K. Shisler. 1985. The role of adult *Ixodes dammini* (Acari:Ixodidae) in transmission of Lyme Disease in New Jersey. J. Med. Entom. 22:88-93

Shisler, J.K. and T.L. Schulze. 1985. Methods for evaluation of costs associated with permanent and temporary control methods for marsh mosquito abatement. J. Amer. Mosq. Control Assoc. 1:164-168.

Shisler, J.K. and D.J. Charette. 1985. Differences in vegetational, macroinvertebrates and soil parameters in three major salt marsh vege tional zones as affected by tide range. Bull. N.J. Acad. of Sci. 30:48.

Charette, D.J., J.K. Shisler and R. Kantor. 1985. Guidelines for the mitigation of tidal salt marshes in New Jersey. pp. 941- 960. *In* Coa Zone 85 O.T. Magoon, H. Converse, D. Miner, D. Clark and L.T. Thomas (Editors). Am. Soc. of Civil Eng. NY NY. 2 pp.

Shisler, J.K. and D.J. Charette. 1985. Effect of varying tidal amplitude on the structure and composition of the major flora in salt marsh along the coast of New Jersey. Bull. Ecol. Soc. of America. 66:270.

Able, K.W. and J.K. Shisler. 1985. New Jersey salt marsh management and research: Issues and opportunities. Estuaries 8:59A.

Shisler, J.K., P.E. Waidelich, S.A. Boeglin and D.J. Charette. 1985. Leghold traps: A literature review of scientific and technical inform tion with annotated bibliography. N.J. Agric. Exp. Station. Publication No. P-40502-01-85. 45 pp.

Shisler, J.K. 1985. The effects of water management for mosquito on nesting marsh hawks. Proc. N.J. Mosq. Control Assoc. 72:53-60.

Schulze, T.L., M.F. Lakat, W.E. Parkin, J.K. Shisler, D.J. Charette, and E.M. Bosler. 1985. Prevalence of the Lyme disease spirochete selected populations of *Ixodes dammini* and *Amblyomma americanum* (Acari: Ixodidae). p. 5. In: Second International Symposi on Lyme Disease and Related Disorders. Compendium of Abstracts. Vienna, Austria 75 pp.

Schulze, T.L., E.M. Bosler, J.K. Shisler, I.C. Ware, M.F. Lakat, and W.E. Parkin. 1985. Prevalence of canine Lyme disease from endemic area as determined by servosurvey. p. 6. In: Second International Symposium on Lyme Disease and Related Disord Compendium of Abstracts. Vienna, Austria 75 pp.

Schulze, T.L., J.K. Shisler, M.F. Lakat, and W.E. Parkin. 1985. Evolution of a focus of Lyme disease. p. 71. In: Second Internatio Symposium on Lyme Disease and Related Disorders. Compendium of Abstracts. Vienna, Austria 75 pp.

Shisler, J.K. 1985. Environmental and water management for vector control. Proc. of the PEEM worksnop at the International Irriga Research Institute, Sri Lanka. p 40-43.

Schulze, T.L., G.S. Bowen, M.F. Lakat, W.E. Parkin and J.K. Shisler. 1986. Seasonal abundance and hosts of *Ixodes dammini* (Acari:Ix dae) and other ixodid ticks from an endemic Lyme disease focus in New Jersey, USA. J. Med. Ent. 23:105-109.

Talbot, C.W., K.W. Able and J.K. Shisler. 1986. Fish species composition in New Jersey salt marshes: Effects of marsh alterations mosquito control. Trans. Ameri. Fisheries Soc. 115:269-278.

Waidelich, P.E. and J.K. Shisler. 1986. The distribution of the Atlantic Ribbed Mussel (*Geukensia demissa*) along tidal creeks in New Jer Bull. N.J. Academy of Science 31:8.

Shisler, J.K., P.E. Waidelich, H.G. Russell and R.B. Peil. 1986. Current status of buffer zones. Bull. N.J. Academy of Science 31:11.

Shisler, J.K. and D.J. Charette. 1986. Evaluation of artificial salt marshes in New Jersey. National Wetlands Newsletter 8(3):4-5.

Shisler, J.K. and D.J. Charette. 1986. Mosquito species and populations levels associated with stormwater facilities in New Jersey. Agricultural Experiment Station Publication No. R-40502-01-86. 22 pp.

Shisler, J.K. 1986. Evaluation of Phase 6 of the Great Meadows Project, Warren County, New Jersey. NJ Agric. Exp. Station Publica No. P-40502-02-86. mimeo 20 pp.

Schulze, T.L., W.M. McDevitt, W.E. Parkin and J.K. Shisler. 1987. Effectiveness of two insecticides in controlling *Ixodes dam* (Acari:Ixodidae) Following an outbreak of Lyme disease in New Jersey. J. Med. Ent. (In press).

Shisler, J.K. and F. Ferrigno. 1987. The impacts of water management for mosquito control on waterfowl populations in New Jersey. 268-282. *In* W.R. Whitman and W.H. Meredith (eds.). Waterfowl and Wetlands Symposium: Proceedings of a Symposium waterfowl and wetlands management in the coastal zone of the Atlantic Flyway, Delaware Coastal Management Program, D ware Department of Natural Resources and Environmental Control, Dover, DE. Doc. Control No. 40- 05/87/07/01. 522 pp.

Ferrigno, F., J.K. Shisler, J. Hansen and P. Slavin. 1987. Tidal restoration of salt hay impoundments. pp. 283-297. *In* W.R. Whitman W.H. Meredith (eds.). Waterfowl and Wetlands Symposium: Proceedings of a Symposium on waterfowl and wetlands man ment in the coastal zone of the Atlantic Flyway, Delaware Coastal Management Program, Delaware Department of Natural sources and Environmental Control, Dover, DE. Doc. Control No. 40-05/87/07/01. 522 pp.

Shisler, J.K., D.J. Charette and T.L. Schulze. 1988. Where and what is coastal wetland mitigation? pp. 19-22. Proceedings of the Mitig Symposium. Association of State Wetland Managers, Chester, VT. 460 pp.

Shisler, J.K. 1988. Northeast coastal wetlands: Mitigation considerations. pp. 408-409. Proceedings of the Mitigation Symposium. Associ tion of State Wetland Managers, Chester, VT. 460 pp.

Shisler, J.K., and D.J. Charette. 1988. Goal setting for wetland mitigation. pp. 281-286. Proceedings of the Mitigation Symposium. Associ tion of State Wetland Managers, Chester, VT. 460 pp.

Jordan, R.A. and J.K. Shisler. 1988. Research needs for the use of buffer zones for wetland protection. pp. 433-435. Proceedings of t Mitigation Symposium. Association of State Wetland Managers, Chester, VT. 460 pp.

Shisler, J.K. and T.L. Schulze. 1988. Coastal wetlands habitats as a beneficial use of dredged material. pp. 55-58. In M.C. Landin (editor "Beneficial Uses of Dredge Material," *Proceedings of the North Atlantic Regional Conference, 12-14 May 1987, Baltimore, Maryland*, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss. 231 pp.

Shisler, J.K. 1989 Creation and restoration of coastal wetlands of the Northeastern United States. pp. 145-165 In. Wetlands Creations a Restoration: The status of the Science Vol I. Ed. J.A. Kusler and M.E. Kentula. U.S.E.P.A. Environmental Research Laborat ry, Corrallis, OR. EPA 600/3-89/038A.

Schulze, T.L., E.C. Taylor, R.A. Jordan, E.M. Bosler, and J.K. Shisler. 1991. Effectiveness of selected granular Acaricide formulations in suppressing populations of *Ixodes dammini* (Acari: Ixodidae): Short-term control of nymphs and larvae. J. Med. Entomc 28(5):624-629.

PAPERS PRESENTED AT PROFESSIONAL MEETINGS

11/15/72 Shisler, J. K. "Preliminary effects in potholes by tidal inundation resulting from mosquito ditching." Northeast Mosquito Control Association, Danvers, MA.

3/16/73 Shisler, J. K. "Pioneer plants on spoil piles associated with mosquito ditching." New Jersey Mosquit Extermination Association, Atlantic City, NJ.

11/2/73 Shisler, J. K. "Diversity and productivity in vegetational and faunal populations inhabiting mosquito ditched salt marshes." Eastern Branch Entomological Society of America, New York City, NY.

2/26/74 Shisler, J. K. and F. H. Lesser. "Long term biological effects of ditching tidewater salt marshes. American Mosquito Control Association, Anaheim, CA.

3/12/75 Shisler, J. K. and D. M. Jobbins. "Biological aspects of ditching salt marshes." American Mosquit Control Association and New Jersey Mosquito Extermination Association. Atlantic City, NJ.

3/11/76 Hansen, J. A., F. H. Lesser, R. W. Lombardi, J. K. Shisler and P. Slavin. "The economics of open marsh water management - A New Jersey view." New Jersey Mosquito Extermination Association Cherry Hill, NJ.

4/23/76 Shisler, J. K. and T. L. Schulze. "The effect of rotary ditcher spoil on the productivity of cordgras (*Spartina patens* (Ait.) Muhl.)." American Mosquito Control Association Boston, MA.

4/23/76 Schulze, T. L. and J. K. Shisler. "Vegetational succession on spoil piles associated with mosquit control ditching." American Mosquito Control Association, Boston, MA.

4/29/76 Shisler, J. K. and T. L. Schulze. "Some aspects of open marsh water management procedures o clapper rail production." Northeast Fish and Wildlife Conference, Hershey, PA.

6/22/76 Shisler, J. K. and D. M. Jobbins. "Movement of organic carbon in natural and managed salt marshes New Jersey." American Society of Limnology and Oceanography, Inc., Savannah, GA.

6/22/76 Schulze, T. L., J. K. Shisler and B. L. Howes. "The effects of *Iva frutescens* on the productivity c *Spartina patens*." American Society of Limnology and Oceanography, Inc., Savannah, GA.

3/18/77 Lesser, F. H., W. J. Crans and J. K. Shisler. "Methods to document mosquito breeding on tida marshes by artificial means." New Jersey Mosquito Control Association, Cherry Hill, NJ.

3/18/77 O'Carroll, G. H. and J. K. Shisler. "Evaluating the multiple impacts of stream renovation for mosqui control." New Jersey Mosquito Control Association, Cherry Hill, NJ.

3/18/77 Burger, J., J. K. Shisler and F. H. Lesser. "Effects of water management on nesting avian species i mosquito control marshes." New Jersey Mosquito Control Association, Cherry Hill, NJ.

3/18/77 Fisher, W. J., J. A. Hansen, C. Imber, F. H. Lesser, J. S. Mason, G. H. O'Carroll, R. Ostergaar and J. K. Shisler. "Mosquito breeding associated with dredge spoil deposition areas in New Jersey. New Jersey Mosquito Control Association, Cherry Hill, NJ.

3/29/77 Shisler, J. K., F. H. Lesser, B. Gooley, J. Hansen and P. Slavin. "Practical application of the rotar ditcher in pond construction." American Mosquito Control Association, New Orleans, LA.

3/29/77 Lesser, F. H. and J. K. Shisler. "Stop Ditches - A new concept of an old technique." American Mos quito Control Association, New Orleans, LA.

3/30/77 Burger, J., J. K. Shisler and F. H. Lesser. "The effects of water management projects for mosquit control on nesting avian species." American Mosquito Control Association, New Orleans, LA.

3/16/78 Shisler, J. K., "Water management methods being utilized in coastal marshes to control mosqu populations." New Jersey Mosquito Control Association, Cherry Hill, NJ.

3/16/78 Burger, J., J. K. Shisler and F. H. Lesser, "The Clam Island Project." New Jersey Mosquito Contr Association, Cherry Hill, NJ.

3/17/78 Shisler, J. K., "The efficiency of water management in coastal areas." New Jersey Mosquito Cont Association, Cherry Hill, NJ.

3/17/78 Slavin, P. T., J. K. Shisler and F. Ferrigno, "Current status of tidal restoration of salt hay impoun ments for mosquito control." New Jersey Mosquito Control Association, Cherry Hill, NJ.

4/18/78 Lesser, F. H., J. K. Shisler and T. Candeletti, "Source reduction: an illustrated glossary techniques." American Mosquito Control Association, Chicago, IL.

4/19/78 Candeletti, T., F. H. Lesser, and J. K. Shisler, "The interrelated benefits of surveillance and larviciding to evaluate water management for mosquito control." American Mosquito Control Association, Chicago, IL.

10/20/78 Lesser, F., J. Shisler and R. Candeletti, "A new look at the efficiency and economics of using amphibious equipment for marsh and water management in New Jersey." Louisiana Mosquito Control Association, New Orleans, LA.

11/3/78 Slavin, P., J. Shisler and F. Ferrigno, "Affects of tidal restoration of a salt hay impoundment on bird populations and vegetations." Northeast Mosquito Control Association, Grossinger, NY.

3/14/79 Shisler, J. K. "Survey of mosquito control equipment in New Jersey." New Jersey Mosquito Contro Association, Cherry Hill, NJ.

3/15/79 Talbot, C. W., K. W. Able and J. K. Shisler, "Preliminary survey of fishes utilizing salt marsh areas that have been altered for mosquito control." New Jersey Mosquito Control Association, Cherry Hil NJ.

3/16/79 Shisler, J. K., "Future consideration in the use of water management equipment." New Jersey Mosqui to Control Association, Cherry Hill, NJ.

4/7/79 Talbot, C. W., K. W. Able and J. K. Shisler, "Salt marsh fishes of New Jersey. A preliminary sur vey." New Jersey Academy of Science, Lawrenceville, NJ.

4/10/79 Lesser, F. and J. Shisler, "Some effects of the Stop Ditch method for Mosquito Control." Americar Mosquito Control Association & Mid-Atlantic Mosquito Control Association, Washington, DC.

4/10/79 Burger, J., J. Shisler and F. Lesser, "Three year evaluation of the effects of water management for mosquito control on avian species." American Mosquito Control Association & Mid-Atlantic Mosqui Control Association, Washington, DC.

4/10/79 Shisler, J. and F. Lesser, "The effects of different ditch depths on vegetation and macroinvertebrates o the marsh." American Mosquito Control Association & Mid-Atlantic Mosquito Control Associatio Washington, DC.

4/11/79 Able, K., J. Shisler and F. Lesser, "A previously unrecognized salt marsh mosquito predator along th mid-Atlantic Coast." American Mosquito Control Association & Mid-Atlantic Mosquito Contr Association, Washington, DC.

4/23/79 Shisler, J. K. "The effect of water management on salt marsh productivity in New Jersey." Florid Anti-Mosquito Association, Tampa, FL.

4/23/79 Lesser, F. and J. K. Shisler, "The effect of water management on salt marsh productivity in New Jersey." Florida Anti-Mosquito Association, Tampa, FL.

2/21/80 Shisler, J. and F. Lesser, "Water management in New Jersey." Mid-Atlantic Mosquito Control Association, Myrtle Beach, SC.

3/13/80 Talbot, C. W., K. W. Able and J. K. Shisler, "Seasonal variation in the composition of fresh and brackish water fishes of New Jersey mosquito control impoundments." New Jersey Mosquito Contr Association, Cherry Hill, NJ.

3/14/80 Chanda, D. A. and J. K. Shisler, "Mosquito control problems associated with storm water control fac ities." New Jersey Mosquito Control Association, Cherry Hill, NJ.

3/29/80 Talbot, C. W., K. W. Able and J. K. Shisler, "Salt marsh fishes of New Jersey: Patterns of seasona variation." New Jersey Academy of Science, New Brunswick, NJ.

4/15/80 Smith, C. M. and J. K. Shisler, "An assessment of storm water drainage facilities as sources of mos quito breeding." American Mosquito Control Association & Utah Mosquito Abatement Associatio Salt Lake City, UT.

4/15/80 Shisler, J. K. and D. Chanda, "An evaluation of storm water facilities as mosquito breeders." Ameri can Mosquito Control Association & Utah Mosquito Abatement Association, Salt Lake City, UT.

4/15/80 Slavin, P. T., J. K. Shisler and F. Ferrigno, "Salt hay impoundments restored to the mosquito contro Effects on birds and vegetation." American Mosquito Control Association & Utah Mosquito Abatem Association, Salt Lake City, UT.

4/16/80 Able, K., J. K. Shisler, F. Lesser and C. Talbot, "Seasonal variations in fish populations utilizing sa marsh mosquito breeding habitats." American Mosquito Control Association & Utah Mosquito Abat ment Association, Salt Lake City, UT.

4/17/80 Shisler, J. K., "Water management methods for mosquito control within New Jersey disposal sites American Mosquito Control Association & Utah Mosquito Abatement Association, Salt Lake City, U

2/26/81 Shisler, J. K. and G. D. Brooks, "The application of New Jersey water management methods for controlling vector mosquito populations in tropical Africa." New Jersey Mosquito Control Association Cherry Hill, NJ.

3/18/81 Shisler, J. K., J. Hansen and T. Candeletti, "The evaluation of costs associated with permanent and temporary methods for mosquito control." American Mosquito Control Association, San Antonio, TX.

4/27/81 Shisler, J. K., "Economics Associated with permanent control of mosquitoes in New Jersey." Florida Anti-Mosquito Association, Fort Lauderdale, FL.

4/13/82 Talbot, C.W., K.A. Able and J.K. Shisler, "Alteration of New Jersey salt marshes for mosquito control - effects on fish species composition." Northeast Division of American Fisheries Society Meeting Cherry Hill, NJ.

4/13/82 Shisler, J.K., F. Ferrigno, R. Hall and J, Hansen, "The value of tidal restoration of salt hay farms." Northeast Fish and Wildlife Conference, Cherry Hill, NJ.

10/13/82* Shisler, J. K., "Is water management feasible in Texas salt marshes and barrier islands?" Keynote Address Texas Mosquito Control Association Meeting, Austin, TX.

3/1/83 Shisler, J. K. and C. S. O'Malley, "Four year evaluation of mosquito species associated with stormwater facilities." American Mosquito Control Association & Florida Anti-Mosquito Association, Lak Buena Vista, FL.

3/1/83 Candeletti, R., J. K. Shisler, T. Candeletti and P. McNeil, "A four year evaluation of a water management project in a barrier island habitat." American Mosquito Control Association & Florida Ant Mosquito Association, Lake Buena Vista, FL.

3/1/83 Slavin, P. and J. K. Shisler, "*Aedes cantator* (Coquillett), an ecotonal species." American Mosquito Control Association & Florida Anti-Mosquito Association, Lake Buena Vista, FL.

3/17/83 Charette, D. and J. K. Shisler, "Mosquito problems associated with stormwater facility development i New Jersey." New Jersey Mosquito Control Association, Atlantic City, NJ.

3/17/83 O'Malley, C. S. and J. K. Shisler, "Mosquito problems associated with stormwater facilities in Burl ington County." New Jersey Mosquito Control Association, Atlantic City, NJ.

3/17/83 Reinert, W. C. and J. K. Shisler, "Problems associated with the Mullica River Impoundment Project. New Jersey Mosquito Control Association, Atlantic City, NJ.

4/9/83 Shisler, J. K. and D. Charette, "Physical factors of stormwater management facilities effecting coloni zation by mosquito populations." New Jersey Academy of Science, Newark, NJ.

4/9/83 Shisler, J. K., F. Ferrigno, R. Hall and J. Hansen, "Tidal restoration of salt hay farms." New Jersey Academy of Science, Newark, NJ.

4/9/83 Slavin, P. and J. K. Shisler, "Habitat separation of three Aedine species (Diptera: Culicidae) in a salt marsh-upland transition zone." New Jersey Academy of Science, Newark, NJ.

3/1/84 Shisler, J. K. and D. Charette, "Mitigated salt marshes and the creation of potential mosquito habitats. New Jersey Mosquito Control Association, Inc., Atlantic City, NJ.

3/24/84 Shisler, J. K. and D. Charette, "The impact of mitigated marshes on mosquito problems in Nev Jersey." American Mosquito Control Association & Ontario Mosquito Control Association Meetin Toronto, Canada.

3/21/84 Shisler, J. K., "A cooperative mosquito control project: The Great Bay Problem." American Mosqu to Control Association & Ontario Mosquito Control Association Meeting, Toronto, Canada.

3/31/84 Shisler, J. K. and David Charette, "Factors effecting the construction of marshes in coast ecosystems." New Jersey Academy of Science Meeting, Montclair, NJ.

10/15/84 Charette, D. J. and J. K. Shisler, "Comparison of the plant community in managed and natural coast foredunes along the Atlantic coast of New Jersey." Coastal Society Annual Meeting, Atlantic City, N.

10/15/84 Shisler, J. K. and D. J. Charette, "Artificial versus natural tidal salt marshes: Are they equivalent f mitigation?" Coastal Society Annual Meeting, Atlantic City, NJ.

10/23/84* Shisler, J. K., "Integrated approach utilized in New Jersey for the control of mosquito population - Invited Dinner Speaker, 21st Northeast Regional Alfalfa, Corn and Small Grains Insect Conferen Cook College-Rutgers University, New Brunswick, NJ.

3/19/85 Shisler, J. K., K. Able, C. Talbot and W. Irion, "Fish species composition and food habits in sa marsh mosquito breeding depressions." American Mosquito Control Association & New Jersey Mc quito Control Association, Atlantic City, NJ.

3/19/85 Shisler, J. K., "The effects of water management for mosquito control on nesting marsh hawks." American Mosquito Control Association & New Jersey Mosquito Control Association, Atlantic City, NJ.

3/30/85 Shisler, J. K., "Differences in vegetational, macroinvertebrates and soil parameters in three major salt marsh vegetational zones as affected by tide range." New Jersey Academy of Science Meeting, Trenton, NJ.

5/15/85* Shisler, J. K., "Data collection involved with water management projects." Florida Anti-Mosquito Association, Sarasota, FL.

5/16/85 Shisler, J. K., "Immediate and long term impacts associated with tidal restoration of coastal impoundments in New Jersey." Wetlands Restoration and Creation Conference, Tampa, FL.

5/16/85 Shisler, J. K., "Quantitative comparison of natural and man-made tidal *Spartina alterniflora* marshes in New Jersey." Wetland Restoration and Creation Conference, Tampa, FL.

8/2/85* Able, K. and J. K. Shisler, "Variability among managed estuarine systems." Estuarine Research Federation Conference, Durham, NH.

10/15/85* Shisler, J. K., "Environmental management in irrigation systems for vector control." Panel of Experts on Environmental Management for Vector Control Workshop at the International Irrigation Management Institute, Kandy, Sri Lanka.

3/20/86 Shisler, J. K., R. Gaugler, T. Candeletti and R. Fusco, "Problems with field evaluations of larvicides in salt marsh habitats." New Jersey Mosquito Control Association, Cape May, NJ.

3/20/86 Shisler, J. K., "A regional project evaluation - The Great Bay Area." New Jersey Mosquito Control Association, Cape May, NJ.

3/21/86 Shisler, J. K., "Where is water management for mosquito control? - A ten year review." New Jersey Mosquito Control Association, Cape May, NJ.

4/5/86 Shisler, J. K., P. E. Waidelich, H. G. Russell and R. B. Piel, "Current status of buffer zones." New Jersey Academy of Science Meeting, Stockton State College, NJ.

4/5/86 Waidelich, P. E. and J. K. Shisler, "The distribution of the Atlantic Ribbed Mussel (*Geukensia demissa*) along tidal creeks in New Jersey." New Jersey Academy of Science Meeting, Stockton State College, NJ.

4/23/86 Shisler, J., "Long term effects of open marsh water management on vegetational associations - A ten year evaluation." American Mosquito Control Association & Louisiana Mosquito Control Association New Orleans, LA.

5/16/86 Shisler, J. K. and D. J. Charette, "Problems with the creation of high marsh habitats." Wetland Restoration and Creation, Tampa, FL.

8/15/86 Charette, D.J. and J.K. Shisler, "The structure and composition of selected managed and natural foredune vascular plant communities along the Atlantic coast of New Jersey, USA." Global Connections in Ecological Theory and Practice, 4th International Congress of Ecology, Syracuse, NY.

9/17/86* Shisler, J.K. and F. Ferrigno. "The impacts of water management for mosquito control on waterfowl populations in New Jersey." Waterfowl and Wetlands Symposium, Wilmington, DE.

9/17/86* Ferrigno, F., J.K. Shisler, J. Hansen and P. Slavin. "Tidal restoration of salt hay impoundments." Waterfowl and Wetlands Symposium, Wilmington, DE.

10/8/86* Shisler, J.K., "Mitigation" National Wetland Symposium: Mitigation of Impacts and Losses, Association of State Wetland Managers, New Orleans, LA.

10/9/86* Shisler, J.K. "Goals for mitigation in the coastal area." National Wetland Symposium: Mitigation of Impacts and Losses, Association of State Wetland Managers, New Orleans, LA.

10/9/86 Jordan, R., J.K. Shisler, P. Wadelick, H. Russell and R. Peil "Buffer Zones." National Wetland Symposium: Mitigation of Impacts and Losses, Association of State Wetland Managers, New Orleans LA.

10/10/86* Shisler, J.K. "Problems with mitigation in the eastern coastal wetlands." National Wetland Symposium Mitigation of Impacts and Losses, Association of State Wetland Managers, New Orleans, LA.

10/14/86 Shisler, J.K., R. Jordan, P. Waidelich, H. Russell and R. Peil. "Buffer Zones" Coastal Society Meeting, New Orleans, LA.

3/5/87* Shisler, J.K. "Wetlands and the need for research." Coalition of Northeast Governors, Morristown, NJ.

4/4/87 Charette, D.J. and J.K. Shisler. "Variation of salt marsh sediment characteristics - sinks of organic matter and nutrients." New Jersey Academy of Science, Stockton College, NJ.

5/12/87* Shisler, J.K. "The use of dredged material in coastal wetlands mitigation." U.S. Army Corps of Engineers: Northeastern Regional Workshop on the beneficial uses of dredged material, Baltimore MD.

6/18/87 Shisler, J.K. "Flood hazard reduction and wetland/river protection." The Association of State Wetland Managers: Northeast Symposium: Wetlands and River Corridor Management, Lake George, NY.

6/18/87 Shisler, J.K. and R. Jordan. "Buffers for wetlands and streams." The Association of State Wetland Managers: Northeast Symposium: Wetlands and River Corridor Management, Lake George, NY.

6/19/87* Shisler, J.K. "Urban wetlands: special management needs." The Association of State Wetland Managers: Northeast Symposium: Wetlands and River Corridor Management, Lake George, NY.

9/17/87* Shisler, J.K. "Maintenance of restored/created wetlands: Avoiding nuisances." Association of State Wetlands Managers. National Symposium: Wetlands Hydrology, Chicago, IL.

9/17/87* Shisler, J.K. "Can wetlands function as stormwater facilities." Association of State Wetlands Managers. National Symposium: Wetlands Hydrology, Chicago, IL.

9/17/87* Shisler, J.K. "Wetland restoration/creation: Designing a project; Tailoring to special conditions. Association of State Wetlands Managers. National Symposium: Wetlands Hydrology, Chicago, IL.

9/18/87* Shisler, J.K. "Wetlands as stormwater management facilities: Avoiding potential problems." Association of State Wetlands Managers. National Symposium: Wetlands Hydrology, Chicago, IL.

1/29/88* Shisler, J.K. "Mitigation: What it is and when is it done?" Wetlands and Mitigation Conference: Meadowlands Chamber of Commerce, East Rutherford, NJ.

2/24/88* Shisler, J.K. "Stormwater Values." An Invitational Seminar: Multiobjective Greenways and Coordination of Wetland and Floodplain Programs. U.S. EPA, Office of Wetland Protection, Washington, DC

2/25/88* Shisler, J.K. "Ten important components in the construction of wetlands." An Invitational Seminar: Multiobjective Greenways and Coordination of Wetland and Floodplain Programs. U.S. EPA, Office Wetland Protection, Washington, DC.

3/18/88 Shisler, J.K. "Wetlands and Mosquitoes." New Jersey Mosquito Control Association Annual Meetin Asbury Park, NJ.

4/9/88 Jordan, R.J., J.K. Shisler and P. Buchinsky. "Vegetation dynamics of New Jersey forested wetlands altered by utility right-of-way construction: A preliminary study." New Jersey Academy of Scienc Kean College, Union, NJ.

5/14/88* Shisler, J.K. "New Jersey Wetlands." Freshwater Wetlands Conference, Society of Real Estat Appraisers, Chapter 37, Morristown, NJ.

5/19/88 Shisler, J.K., R.J. Jordan, T.L. Schulze and P. Buchinsky. "Impacts of clear cutting on northeaster palustrine forested wetlands." Wetland Restoration and Creation Conference, Tampa, FL.

5/1/88 Shisler, J.K., R.A. Jordan and R. Piel. "The use of buffers in th protection of coastal wetlands: A fi look." Society of Wetland Scientists, Washington, DC.

5/2/88 R.A. Jordan, J.K. Shisler and P. Buchinsky. "A preliminary study of the environmental impacts power line rights-of-way on New Jersey forested wetlands." Society of Wetland Scientists, Washir ton, DC.

6/17/88* Shisler, J.K. "Minimizing stormwater management impacts." Mitigating Environmental Impac Technical and Policy Issues. The Urban Land Institute, Oakland, CA.

6/27/88* Shisler, J.K. "Stormwater Management and wetland ecosystems." National Symposium: Wetlands ' Urban Wetlands and Riparian habitat. Association of State Wetland Managers, Oakland, CA.

6/28/88* Shisler, J.K. "Urban wetland systems." National Symposium: Wetlands '88 Urban Wetlands ar Riparian Habitat. Association of State Wetland Managers, Oakland, CA.

8/3/88* Shisler, J.K. "The use of stormwater management facilities as wetlands." Sediment and Stormwater Conference, Baltimore, MD.

10/1/88* Shisler, J.K. "Wetlands." Morris County Planning Workshop, Morristown, NJ.

10/12/88* Shisler, J.K. "Wetlands and Stormwater Management." Living with Wetlands, New York City Plar ning Commission, Staten Island, NY.

3/14/89* Shisler, J.K. "Considerations in the Design of Stormwater Facilities for Wetland Protection." Asso tion of State Floodplain Managers & U.S. EPA "Urban Stream Corridor and Stormwater Manageme Colorado Springs, CO.

3/21/89* Shisler, J.K. "Can Wetlands be used for Stormwater Treatment?" Multi-objective Management River Corridors and their Restoration, U.S. E.P.A. & Tennessee Valley Authority, Knoxville, TN.

3/22/89* Shisler, J.K. "Recreational Considerations in the Design of Wetlands" Multi-objective Management of River Corridors and their Restoration, U.S. E.P.A. & Tennessee Valley Authority, Knoxville, TN.

7/6/89* Shisler, J.K. "Creative Design Alternatives for Stormwater Management" Internation Symposium: Wetlands and River Corridor Management, Association of Wetland Managers, Charleston, SC.

7/7/89* Shisler, J.K. "Stormwater Management Design." International Symposium: Wetlands and River Corridor Management, Association of Wetland Managers, Charleston, SC.

7/6/89* Snyder, R. and Shisler, J.K. "Creative use of wetlands for stormwater management." Internation Symposium: Wetlands and River Corridor Management, Association of Wetland Managers, Charleston, SC.

9/9/89* Shisler, J.K. "Wetland Mitigation" A Blueprint for Action, N.Y. Department of Environmental Protection, New York, NY.

10/12/89* Shisler, J.K. "Considerations in wetland mitigation in the Northeast." 10th International Estuarin Research Conference, Estuarine Research Federation, Baltimore, MD.

4/4/90* Shisler, J.K. "Standards and Criteria: How can one insure project success?" No Net Loss Symposium, U.S. Army Corps of Engineers, Jackson, MS.

4/5/90* Shisler, J.K. "Common denominators and special considerations in Project evaluations, design, implementation-in a coastal/estuarine context." No Net Loss Symposium, U.S. Army Corps of Engineers Jackson, MS.

4/6/90* Shisler, J.K. "Non-regulatory opportunities for restoration/creation" No Net Loss Symposium, U.S Army Corps of Engineers, Jackson, MS.

4/25/90* Shisler, J.K. "Urban Stormwater, Streams and Wetlands." Restoration of Urban Streams and Wetlands: A multi-objective Approach, Country in the City Symposium, Portland, OR.

6/29/90* Shisler, J.K. "Wetlands and Streams." New York Academy of Medicine Symposium: Drinking Water Crisis in the Greater New York Area, New York, NY.

11/16/90* Shisler, J.K. "Using Created Wetlands for Stormwater Management" Wetlands and Real Estate Development Seminar, Urban Land Institute, Orlando, FL.

9/11/91* Shisler, J.K. "Wetlands and Stormwater Management." Association of Wetland Managers Meeting: "Altered, Artificial, and Managed Wetlands with special emphasis on agricultural wetlands." Chicago IL.

10/29/91* Shisler, J.K. "Wetland Restoration." Association of State Floodplain Managers, Pittsburgh, PA.

1/9/92* Shisler, J.K. "Urban Wetlands and Stormwater Management." U.S. EPA Workshop "Wetlands Stormwater Workshop" Clearwater Beach, FL.

2/20/92* Shisler, J.K. "Setting Goals for Urban Wetlands Restoration Based Upon Attainable Conditions." U.S EPA Workshop "Reducing Risks to Wetlands in an Urban Landscape.", New York, NY.

3/6/92* Shisler, J.K. "The Management of Urban Wetland Systems" Urbanization and Riverine Environment A Balancing of Values, Houston, TX.

4/7/92* Shisler, J.K. "How Wet is a Wetland?" Wetland Law and Regulation - Short Course, Cook College, New Brunswick, NJ.

4/29/92* Shisler, J.K. "Ecotourism and Management of Wetland Systems is the Coastal Environment Fir World Congress on Tourism and the Environment, Belize City, Belize.

5/14/92* Shisler, J.K. "Wetlands and Regulations in New Jersey" California Workshop on Wetlands" Worlc Wildlife Fund, Sacramento, CA.

5/18/92* Shisler, J.K. "Wetland Mitigation Banking: An Examination of the Concept" Wetlands Delineatior Mitigation & Permitting Procedures", Washington, DC.

6/6/92* Shisler, J.K. "Non-Point Source Pollution Control and the Management of Wetland Systems" Semin on Non-Point Source Pollution Control, Stafford Township, NJ

6/24/92* Shisler, J.K. "Should You be giving Mitigation Credits for Stormwater/Wetlands?" National Wetlan Symposium, West Palm Beach, FL

9/23/92* Shisler, J.K. "Wetlands and Stormwater Management" NJ Department of Environmental Protection Energy, Office of Regulatory Policy, Trenton, NJ.

10/30/92* Shisler, J.K. "Stormwater/Wetlands Management and Changes with time in the Urban Watershed Geological Association of New Jersey, Somerset, NJ

1/13/93* Shisler, J.K. "Use of Wetlands for Stormwater Management - Design, Construction and Maintenance New Jersey 2nd Annual Native Plant Symposium, Columbus, NJ

* Invitational Speaker

DCR - APPENDIX EE

CONGOLEUM CORPORATION

PLANT #1

FINANCIAL RESPONSIBILITY DOCUMENTS

Congoleum CORPORATION

211 University Office Plaza II
3705 Quakerbridge Road
Mercerville, New Jersey 08619
(609) 584-3000

January 14, 1994

MR. DARIN SCHAFFER
STATE OF NEW JERSEY
DEPT. OF ENVIRONMENTAL PROTECTION & ENERGY
BUREAU OF DISCHARGE PREVENTION
CN 027
TRENTON, NJ 08625-0027

RE: 861 SLOAN AVENUE
TRENTON, NJ

Dear Mr. Schaffer:

Reference is made to your letter of November 30, 1993 to Robert G. Rucker regarding the DPCC/DCR Plan financial responsibility requirements.

As discussed yesterday, the following documents will respond to your Item #18, 19 and 20.

1. Certificate of Insurance for off-site pollution liability. (Copy enclosed)

2. Certificate of Insurance for on-site environmental clean-up for $25,000. (Copy enclosed)

3. Letter of Credit for on-site environmental clean-up for $75,000. (Pending application expected to be completed by February 1, 1994)

The reduced figure for on-site clean-up was agreed to because of the size of our tank and the substance - #6 fuel oil.

Please call me should you have any questions.

Thank you.

Very truly yours,

D. GOLEMME
RISK MANAGER

DG:btp
Enclosure(s)
cc: H.N.FEIST - w/o enc.
R.G.RUCKER

Evidence of Insurance

This certificate is issued at the request of:

Date Issued: January 6, 1994

STATE OF NEW JERSEY
Department of Environmental Protection & Energy
Division of Environmental Safety, Health & Analytical Programs
CN424
Trenton, New Jersey 08625-0424

This is to certify that the policy indicated below has been issued to:

Name and Address of Named Insured:
Hillside Industries and/or Congoleum Corporation and/or Amtico Corporation

Insurance Company:
Industrial Risk Insurers

Policy Number:
31-3-61212

Effective Date	**Expiration Date**	**For an Amount Not Exceeding**
August 1, 1993	August 1, 1996	**$25,000 Any One Occurrence For All Interests Covered**

Property Covered:	Pollutant Cleanup (see attached)
Location:	861 Sloan Avenue, Trenton, Mercer County, New Jersey
Perils:	Fire, Extended Coverage, Vandalism & Malicious Mischief, Sprinkler Leakage, Boiler & Machinery
Deductible:	$100,000 per occurrence
Special Provisions:	None

Except to the extent specifically set out under "**Special Provisions**", this certificate confers no right(s) whatsoever on the addressee(s) or holder(s) hereof and is furnished as a convenience only. Other than with respect to the right(s) set out above under "**Special Provisions**", the intent and purpose of this certificate is merely to provide information about the issuance of the above-mentioned policy and to describe certain features of the coverage as it exists on the date of issuance hereof. Other than as specifically provided under "**Special Provisions**" above the policy is subject to endorsement, alteration, assignment and cancellation without notice to the addressee(s) or holder(s) of this certificate.

George Kaerner
Johnson + Higgins
Representative

CERTIFICATE NO.
HILLSIDE.GK/DI/January 6, 1994

EVIDENCE OF INSURANCE

POLLUTANT CLEANUP AND REMOVAL - The necessary and reasonable expenses actually incurred by the Insured to cleanup and remove Pollutants from land or water confined to Described Premises if the discharge, dispersal, seepage, migration, release or escape of the Pollutants is directly caused by physical loss or damage not otherwise excluded which occurs during the term of this policy, except no liability is assumed for the expense to cleanup and remove:

a. Pollutants from land or water at any location covered under the provisions of the Newly Acquired Property clause (III.B. in the General Conditions); or

b. Pollutants from land or water at any Miscellaneous Unnamed Location.

LIMIT OF LIABILITY - Liability for loss under this Pollutant Cleanup and Removal provision arising out of one Occurrence at each location, or in the aggregate for all such losses in any one policy year at each location, shall not exceed $25,000.

No liability shall exist under this Pollutant Cleanup and Removal provision unless such expenses are reported to the Companies within one hundred eighty (180) days of the date if this policy, whichever shall be earlier.

ACORD. CERTIFICATE OF INSURANCE

ISSUE DATE (MM/DD/YY) 01/13/94

PRODUCER

JOHNSON & HIGGINS
ATTN: MAUREEN RALEIGH
CASUALTY DEPARTMENT
125 BROAD STREET
NEW YORK NY 10004-2424

INSURED

CONGOLEUM CORPORATION
HILLSIDE INDUSTRIES, INC.
405 PARK AVENUE
NEW YORK, NY 10022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

COMPANIES AFFORDING COVERAGE

COMPANY LETTER	A	NATIONAL UNION FIRE INS. CO.
COMPANY LETTER	B	N/A
COMPANY LETTER	C	N/A
COMPANY LETTER	D	N/A
COMPANY LETTER	E	

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
	GENERAL LIABILITY				GENERAL AGGREGATE	$
	COMMERCIAL GENERAL LIABILITY				PRODUCTS-COMP/OP AGG.	$
	CLAIMS MADE OCCUR.				PERSONAL & ADV. INJURY	$
	OWNER'S & CONTRACTOR'S PROT.				EACH OCCURRENCE	$
					FIRE DAMAGE (Any one fire)	$
					MED. EXPENSE (Any one person)	$
	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT	$
	ANY AUTO					
	ALL OWNED AUTOS				BODILY INJURY (Per person)	$
	SCHEDULED AUTOS					
	HIRED AUTOS				BODILY INJURY (Per accident)	$
	NON-OWNED AUTOS					
	GARAGE LIABILITY				PROPERTY DAMAGE	$
	EXCESS LIABILITY				EACH OCCURRENCE	$
	UMBRELLA FORM				AGGREGATE	$
	OTHER THAN UMBRELLA FORM					
	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY				STATUTORY LIMITS	
					EACH ACCIDENT	$
					DISEASE--POLICY LIMIT	$
					DISEASE--EACH EMPLOYEE	$
A	OTHER POLLUTION LEGAL LIABILITY	PLL 5290858	2/1/93	2/1/94	$5,000,000 EACH LOSS/ $10,000,000 TOTAL ALL LOSSES. SELF-INSURED RETENTION $250,000	

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS RE: TRENTON PLANT #1 (OPER. CENTER), 861 SLOANE AVE., TRENTON, NJ 08619.

SEE PAGE 2 ATTACHED

CERTIFICATE HOLDER

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AND ENERGY
BUREAU OF DISCHARGE PREVENTION
CN 027
TRENTON, NJ 08625-0027

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 60 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE Roberto A. Rivera

The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):

a. Bankruptcy or insolvency of the insured shall not relieve the ("Insurer" or "Group") of its obligations under the policy to which this endorsement is attached.

b. The ("Insurer" or "Group") is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action, with a right of reimbursement by the insured for any such payment made by the ("Insurer" or "Group"). This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms.

c. Whenever requested by the Department, ("Insurer" or "Group") agrees to furnish to the Department a signed duplicate original of the policy and all endorsements.

d. Cancellation or any termination of the insurance by the ("Insurer" or "Group") will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured or 60 days after a copy of such written notice is received by the Department, whichever is later.

e. The insurance covers claims for any occurrence that commenced during the term of the policy that is discovered and reported to the ("Insurer" or "Group") within six months of the effective date of the cancellation or termination of the policy, provided an Extended Discovery Period option is purchased.

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRISTINE TODD WHITMAN
Governor

ROBERT C. SHINN, JR.
Commissioner

AUG 24 [illegible]

Robert G. Rucker
Congoleum Corp.
861 Sloan Ave.
Trenton, NJ 08619

Re: Financial Responsibility Approval for Congoleum Plant #1
DIFF # 110300366000
Congoleum Corp.- Plant #1
861 Sloan Ave.
Hamilton Twp., Mercer County

Dear Mr. Rucker:

Thank you for your July 27, 1994 submission (through Hillside Capital, Inc.) of the required financial responsibility documentation for your approved DPCC/DCR plan.

The certificate of insurance was reviewed in accordance with N.J.A.C. 7:1E-Appendix B and deemed complete pursuant to N.J.A.C. 7:1E-4.5(1). The bureau lifts the suspension of enforcement for not having financial responsibility as detailed in the approval letter for Congoleum Plant #1 dated March 9, 1994.

If you have any questions concerning this letter or any other aspect of N.J.A.C. 7:1E, please contact your project manager, Darin Shaffer, at (609) 292-1690.

Respectfully,

Robert J. Kotch, P.E., P.P., Chief
Bureau of Discharge Prevention

c: Donald Golemme, Congoleum
Beth Reddy, Chief, Engineering Review Section
Darryl Jennus, Chief, Field Verification Section
Darin Shaffer, Senior Environmental Engineer

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

CHRISTINE TODD WHITMAN
Governor

ROBERT C. SHINN, JR.
Commissioner

JUL 06 1994

VIA FAX and CERTIFIED MAIL 8391460852
RETURN RECEIPT REQUESTED

Don Golemme
Congoleum Corp.
P.O. Box 3127
Mercerville, NJ 08619

Re: Financial Responsibility for Congoleum Corp. (Plants #1 and #2); Hamilton Twp., NJ.

Dear Mr. Golemme:

Thank you for your letters dated June 9, 1994 in which you provided certificates of insurance for each Congoleum facility located in Hamilton Twp., NJ.

A review of the certificates revealed that the certificates are not worded identical to the certificate of insurance found at N.J.A.C. 7:1E-Appendix B. The changes that must be made to the certificates are indicated on the copy of the certificate of insurance for Plant #1. The same changes must be made to both certificates, and the revised certificates must be submitted to the Department by July 27, 1994.

If you have any questions regarding this letter, please contact me at (609) 292-1690.

Sincerely,

Darin L. Shaffer

Darin L. Shaffer
Senior Environmental Engineer
Bureau of Discharge Prevention

Enclosure
c: Amy Wiker, Congoleum

Congoleum Corporation

Certification:

Choose one word and eliminate brackets (do this throughout certification)

1. Commerce and Industry Division of American International Group, [the "Insurer" or "Group"], as identified above, hereby certifies that it has issued liability insurance covering the following facility: Trenton Plant #1, 861 Sloane Avenue, Hamilton Twsp, NJ, for taking corrective action caused by discharge arising from operating the facility identified above.

The limits of liability are $5,000,000 each occurrence and $10,000,000 annual aggregate, exclusive of legal defense costs. This coverage is provided under PLL5290914. The effective date of said policy is 2/1/94.

Paragraph # 2 is missing

a. Bankruptcy or insolvency of the insured shall not relieve the ["Insurer" or "Group"] of its obligations under the policy to which this certificate applies.

b. The ["Insurer" or "Group"] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action, with a right of reimbursement by the insured for any such payment made by the ["Insurer" or "Group"]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms.

c. Whenever requested by the Department, ["Insurer" or "Group"] agrees to furnish to the Department a signed duplicate original of the policy and all endorsements.

d. Cancellation or any termination of the insurance by the ["Insurer" or "Group"] will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured or 60 days after a copy of such written notice is received by the Department, whichever is later.

e. The insurance covers claims for any occurrence that commenced during the term of the policy that is discovered and reported to the ["Insurer" or "Group"] within six months of the effective date of the cancellation or termination of the policy.]

Congoleum Corporation

I hereby certify that the wording of this instrument is identical to the wording in Appendix B of N.J.A.C. 7:1E and that the ["Insurer" or "Group"] is [licensed to transact the business of insurance" or "eligible to provide insurance as an excess or surplus lines insurer in the State"].

Signature of Authorized Representative of the Insurer

Signature and name must agree

Lisa Lisibendor / Regional Manager

Edward Scheiffele

Underwriter, Authorized Representative of Commerce and Industry Division of American International Group, 80 Pine Street, New York, NY 10005.

DCR - APPENDIX FF

CONGOLEUM CORPORATION

PLANT #1

AGREEMENT WITH LOCAL EMERGENCY PLANNING COMMITTEE

February 4, 1994

Mrs. Amy E. Wiker
Congoleum Corporation
P.O. Box 3127
861 Sloan Avenue
Hamilton Township
Mercerville, NJ 08619

RE: Written Agreement/ LEPCs and DPCC/DCR Facilities

Dear Mrs. Wiker:

This letter is to acknowledge receipt of the DPCC/DCR Plan for **Congoleum Corporation's Trenton Plant #1.**

Your Plan will become part of our communities efforts in planning future strategies for our municipal responders.

Plan Received: 2/4/94

Sincerely,

Walter H. Bronek Jr.

Walter H. Bronek, Jr., Chief
Hazardous Materials Response

OFFICE OF
EMERGENCY MANAGEMENT
Bureau of Hazardous Materials
Bureau of Emergency Communications

2090 GREENWOOD AVENUE, CN00150, HAMILTON, NEW JERSEY 08650 Phone 609/890-3572; 3584 (Emergency only)

September 8, 1993

Congoleum Corporation
861 Sloan Ave.
Hamilton Township
Trenton, N.J. 08619

Re: Written Agreement/LEPCs &
DPCC Facilities

Dear: Mr. Robert Rucker

This letter is to acknowledge receipt of the emergency plan for Congoleum Corporation on September 3, 1993.

Your plan will become part of our communities effort in planning future stratagies for our municipal responders.

Plan Received: 9/3/93

Sincerely,

Walter H. Bronek Jr

Walter H. Bronek, Jr., Chief
Hazardous Materials Response

Attachment 5 to
Response of Congoleum Corporation to United States Environmental Protection Agency Region II's Request, Dated April 25, 1996, for Information Pursuant to Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9604

GHA CONSULTING SERVICES INC.

300 Welsh Road
Building Three, Suite 110
Horsham, PA 19044-2209
Telephone: (215) 784-9500
(800) 673-7965
Fax: (215) 784-9501

May 3, 1996

Michelle Burroughs
Congoleum Corporation
1945 E. State Street
P.O. Box 3127
Trenton, NJ 08619

Re: MEK Geoprobe Delineation

Dear Michelle:

This letter is accompanied by a corrected report previously submitted to you on November 14, 1995. The original submittal indicated that the Geoprobe delineation activities took place on November 11, 1995. In fact they took place on Friday, November 10, 1995.

Please accept my apologies for what I believe is a typographical error.

Very truly yours,

Robert N. Roop, P.E.
Vice President, Environmental Services

Enclosure

cc: Michael Williams

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